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Farm-based recreation in England and Wales

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FARM-BASED RECREATION IN ENGLAND AND WALES

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of the University's requirements
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Abstract.

The engagement of farm businesses with pluriactivity in response to persistent downward pressures on agricultural incomes provided an enduring focus for research in agricultural geography during the late 20th century. This study contributes to and further develops the pluriactivity genre of research through a detailed investigation of farm-based recreation.

A review of existing literature reveals that farm-based recreation has been widely acknowledged as a significant component of pluriactivity, yet the reasons for its contemporary development remain largely unexplored for two main interrelated reasons. First, the concept of pluriactivity is inadequate because it places emphasis on income-generating non-agricultural enterprises, yet many recreational activities fill non-economic roles within the farm business and have therefore been ignored in previous research. Secondly, those studies that examine farm-based recreation specifically are anachronistic and suffer from a failure to define it consistently. The variety of recreational activities included within 'recreation' varies considerably between studies. For example, the majority of studies have not included short-term recreational events in their analyses. The economic nature of these studies is again a handicap.

This study resolves definitional issues and presents a conceptual framework for a more rigorous analysis of farm-based recreation than hitherto has been attempted. The framework synthesizes the underlying principles of the established modified political economy approach in agricultural geography with insights from postmodernism in rural geography as represented by the 'cultural turn'. It represents a rational, sensible and profitable approach which combines the major strengths and takes account of the criticisms of both perspectives. Its value for this study is that a flexible methodology can be used to ensure that the analysis is sensitive to the great diversity of both recreational activities and the farm business forms within which they are enmeshed.

An extensive postal questionnaire survey of over 4000 farms is conducted in eight geographical regions (counties) selected primarily on the basis of their agricultural characteristics. This enables the diversity of recreational activities to be fully appreciated and a geographical analysis of them to be undertaken, features rarely explored by the literature. Building upon the quantitative approach of the postal questionnaire survey, 20 individual farm businesses are selected for more detailed qualitative investigation in the form of ethnographic case studies. Using the conceptual framework as a guide, results from both quantitative and qualitative approaches are discussed in an *integrative* way to provide a novel analysis of farm-based recreation.

The results highlight the widespread occurrence of recreational activities. Indeed, 41% of the postal questionnaire survey respondents provide some form of permanent and/or temporary recreational activity, a figure significantly higher than typically reported in previous studies. Differentiated by broad categories, and specific types, the diversity of different forms of recreational provision becomes apparent, highlighting the occurrence of numerous types rarely documented before. Distinct patterns emerge from an analysis of the inter- and intra-regional incidence of recreational provision.

The characteristics of recreational activities and the factors influencing their initiation, operation and evolution are explored. The relatively low level of financial motivation expressed in relation to the initiation of recreational activities is of particular interest (42% of farms with recreational provision), and highlights the abundance of non-financially motivated forms and the importance of interest, altruistic and social motives. Clear variations in motives according to categories, and types, of recreational activity are also observed and two broad groups, characterised as economic '*diversification recreation*' and non-economic '*cultural recreation*', emerge. Detailed analysis of the relationships between recreational provision and farm business characteristics and operation identifies many strong links. Finally, an exploration of the reasons for the non-adoption of recreational activities is undertaken.

With a renewed policy emphasis on rural development, including on-farm diversification, from the Agenda 2000 reform of the European Union's Common Agricultural Policy (CAP) currently being implemented, these findings make a significant contribution to the understanding of a phenomenon that is likely to be important to both farmers and researchers in agricultural geography in the early 21st century.

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GLOSSARY OF ACRONYMS.

ADAS	Agricultural Development and Advisory Service.
AONB	Area of Outstanding Natural Beauty.
BT	British Telecommunications Plc.
CAP	Common Agricultural Policy.
CC	Countryside Commission.
CLA	Country Landowners Association.
CWS	Co-operative Wholesale Society.
DART	Dartington Amenity Research Trust.
EC	European Community.
ERDP	England Rural Development Plan.
ESA	Environmentally Sensitive Area.
EU	European Union.
FAG	Farm Attraction Group.
FDGS	Farm Diversification Grant Scheme.
FRCA	Farming and Rural Conservation Agency.
FTE	Full Time Equivalent.
GIS	Geographical Information Systems.
LFA	Less Favoured Areas.
LQ	Location Quotient.
MAFF	Ministry of Agriculture Fisheries and Food.
NFAN	National Farm Attraction Network.
NAWAD	National Assembly of Wales Agriculture Department.
NFU	National Farmers Union.
OGA	Other Gainful Activity.
OPCS	Office of Population, Censuses and Surveys.
PYO	Pick-your-own.
RBST	Rare Breeds Survival Trust.
RSPCA	Royal Society for the Prevention of Cruelty to Animals.
UK	United Kingdom.
WTO	World Trade Organisation.
YFC	Young Farmers Club.

1.1. Agricultural Geography and Farm Business Adjustment.

Farm businesses in England and Wales are undergoing a continuous process of adjustment in the face of rapidly changing circumstances. The modernisation of agricultural production, through the interrelated processes of intensification, concentration and specialization (Bowler 1985 and 1986), has transformed agriculture from a position of post-war shortages to one of large structural surpluses of many commodities. The provision of improved technology, and price support schemes through the Common Agricultural Policy (CAP) has considerably accelerated these processes (Ilbery 1988).

However, this post-war process of modernisation, widely characterised as the 'productivist era' (Bowler 1992a), was largely responsible for an interrelated set of financial, production and environmental crises, which came to a head in the mid-1980s. As a response to these problems, a variety of new policy initiatives has been emerging since the late 1980s. These comprise two key elements; an emphasis on controlling surplus food production and the development of agri-environmental policy to encourage environmentally friendly farming practices.

One result of these changes is that agricultural products are subject to a further cost-price squeeze. The prices realised for agricultural products have continued to decline as a consequence of falling production subsidies and the introduction of new production controls (such as set-aside) aimed at both reducing surpluses and the budgetary costs of agriculture to the state, and achieving compliance with world free-trade legislation (Potter and Goodwin 1998). These changes have been characterised as a move towards a post-productivist agricultural system and referred to as the 'post-productivist transition' (Lowe *et al* 1993, Shucksmith 1993, Ward 1993).

Further reforms of the CAP and World Trade Organisation (WTO) negotiations are likely to exert further downward pressures on prices in the future. At the same time, production costs have continued to escalate. The adoption of new technology, statutory and legislative changes (for example, animal welfare and food safety), and compliance with quality assurance scheme requirements have all contributed to increased production costs. The continuing cost-price squeeze has made the task of maintaining income levels from primary agriculture increasingly difficult. This is especially so for family farm businesses, which according to Gasson *et al* (1988) control over 90% of UK holdings. In response to these changing circumstances, farm businesses in England and Wales are adopting an expanding

range of adjustments to their business operations.

The research agenda in agricultural geography, during the late 1980s and throughout the 1990s has broadly reflected these agricultural policy shifts. There has been a strong emphasis on the way in which farmers are adjusting to changing circumstances. These responses have been termed 'farm adjustment strategies' or 'agricultural restructuring'. Reflecting this interest Marsden *et al* (1986a) identified survival and accumulation strategies, Munton (1990) noted seven elements of farm adjustment (Table 1.1) and Bowler (1992a) defined seven pathways of farm business development.

	Element	Description
1	Farm Enterprise Change	Changing the emphasis of the farm enterprises (e.g. expanding sheep while contracting dairy enterprise).
2	Labour Change	Usually by substituting family labour for hired labour in order to reduce costs, but could be an increase in hired labour.
3	Business Structure Change	Usually by changing from sole operator to a partnership to reduce tax.
4	Tenure Change	Either by buying land that was previously rented or by selling owner-occupied land and leasing it back.
5	Size Change	Buy or sell land either to expand the farm business or to finance restructuring.
6	Economic Centrality Change	Increase (or decrease) income from off-farm sources, thus changing the economic centrality of the farm business to the family household.
7	Diversification Change	Increasing income from non-farming enterprises based on the farm (e.g. bed and breakfast or farm shop)

Table 1.1. Elements of farm business adjustment (After Munton 1990).

Evans and Morris (1997) identified three specific themes within the general literature on farm business adjustment. First, agri-environmental issues have featured prominently. This reflects the rapid development of agri-environmental policy in response to concerns about the impacts of 'productivist' farming systems on the environment (Robinson 1991). This has given rise to a considerable body of work mainly concerned with documenting new measures and their effectiveness (see for examples, Baldock *et al* 1990, Brotherton 1991, Morris and Potter 1995, Wilson 1996). Arguably there has been an over-concentration on these issues relative to their significance in terms of overall CAP spend. However, perhaps more importantly, as Evans and Morris (1997) noted, these agri-environment measures have yet to be fully incorporated into models of farm adjustment.

Secondly, there has been a growing emphasis on agriculture as a component within the

global food system. Research has focused on the way 'vertical integration' has developed as agriculture has been drawn into the wider food chain through the development of linkages between farm businesses and businesses supplying inputs to them (upstream) and those marketing outputs from them (downstream). The nature and extent of these linkages provide a focus for considerable research interest in agricultural geography (for example, see Marsden *et al* 1986b, 1987 and 1989, Bowler and Ilbery 1987, Whatmore *et al* 1987a and 1987b, Bowler 1992a, Le Heron 1993).

Thirdly, the development of off-farm employment and on-farm diversification (elements 6 and 7 in Table 1.1), as one way in which farm businesses adjust to changing agricultural markets has provided a major research focus within agricultural geography (see for example, Ilbery 1988, Gasson 1990, Bateman and Ray 1994, Ilbery *et al* 1996). The umbrella term pluriactivity has developed to embrace these activities (Evans and Ilbery 1993). In England and Wales many farm families are increasingly reliant on these pluriactive sources of income as a result of the continuing cost-price squeeze on agricultural products (Evans 1990, Arkleton Trust 1992, Ilbery *et al* 1998). The provision of recreation is a major constituent of on-farm activities generating additional income. For example, recently Ilbery *et al* (1996) reported that 13% of the farms in their survey of farm business diversification had recreational activities. The importance of recreation reflects the wide variety of different types of recreational activities possible and the inherent suitability of many of these for provision on farms. However, although recreational provision is necessarily included in holistic studies of farm diversification and subsequently pluriactivity (Ilbery 1991, Arkleton Trust 1992, Bateman and Ray 1994), it has received no specific research attention since the groundbreaking studies of Davies (1973), Dartington Amenity Research Trust (DART) (1974) and Bull and Wibberley (1976) with the notable exception of Ilbery (1989).

1.2. Study Aim and Objectives.

The overall aim of this study is a detailed exploration of the phenomenon of farm-based recreation in England and Wales. This reflects the continuing interest in farm diversification as one possible element of farm adjustment (for example, Ilbery *et al* 1996), a growth in the demand for recreation and leisure facilities (Clark 1994) and the recent development of regional Farm Attractions Groups (FAG) to help promote recreational attractions (Ilbery 1996).

In order to achieve this aim, the study has six major objectives:

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- I. to review critically the literature on farm-based recreation and tourism to identify the definitions employed and the issues which they have failed to identify or to address adequately;
 - II. to devise a conceptual framework to inform primary research into farm-based recreation;
 - III. to examine the spatial distribution and variation of farm-based recreational activities in England and Wales;
 - IV. to explore the relationships between farm, household and business characteristics and relations, and the initiation, operation and evolution of specific recreational activities on individual farm businesses and their geographical variation;
 - V. to consider the factors inhibiting the development of recreational activities by farm businesses and their geographical variation;
 - VI. to discuss the implications of the findings on farm-based recreation for the operation and adjustment of agricultural businesses, suggesting directions for future research.

These objectives represent a logical sequential research process which progresses from the initial identification of research aims, through the application of theoretical ideas developing in geography, to empirical analysis at both a broad national scale and a detailed farm level.

1.3. Study Structure.

The study is structured around 10 subsequent chapters. These can be divided into two distinct groups. First, those concerned with the research framework and second, those dealing with the results and analysis of the primary research.

With reference to the research framework, the remainder of this Chapter and Chapter 2 presents a review of the literature pertaining to pluriactivity, farm-based tourism and recreation. This highlights the extent of, and deficiencies in, previous research. Chapter 3 is concerned with devising a theoretically informed conceptual framework for the research. This employs insights from postmodernism to establish a stronger link between contemporary theoretical perspectives and empirical research and reflects a sensitivity to likely variations in farm-based recreational activities outlined in 1.4. The third part of the research framework centres on the theoretically informed selection of the research methodologies and techniques for empirical research. An extensive postal questionnaire survey coupled with a relatively small number of intensive 'ethnographic' case studies is advocated in Chapter 4. Together these three chapters directly satisfy objectives 1 and 2, outlined in 1.2, and under-pin the collection of primary data required to meet objectives 3, 4, and 5.

The results and associated analyses are presented in Chapters 5 through to 11. The incidence and distribution of recreational provision provides the focus in Chapter 5. Chapter 6 explores farmers' constructions of 'farm-based recreation', an issue which emerges from the postal questionnaire survey phase of the research. In Chapters 7 and 8, the results and analyses are concerned specifically with the recreational activities themselves, their initiation, and operation and evolution, respectively. Chapter 9 explores the relationship between recreational activities and the farm business as a whole, in terms of both farm business characteristics and farm business adjustment. Whenever possible the analyses presented in these chapters attempts to integrate the results from the postal questionnaire survey and 'ethnographic case study' methodologies. Non-adopters of recreational provision, their reasons for non-adoption and their farm characteristics provide the focus of Chapter 10. The final chapter, 11, is concerned with the implications of the research and identifies study challenges and topics for further research. Together these chapters address objectives 3 through to 6.

1.4. Defining Farm-Based Recreation.

There are two key aspects relating to the definition of farm-based recreation which require clarification; its financial relationship to the farm business, and the specific 'types' of activity included within the term 'recreation'. Together clarification of these two aspects constitutes a reconceptualisation and definition of the term 'farm-based recreation'.

(i). THE ECONOMIC DYNAMIC.

Where farm-based recreational activities exist, they can make a varying contribution to the viability of the farm business. If this contribution is considered against the contribution of all other business activities (including other forms of on-farm diversification, off-farm employment and agricultural activities), it is possible to place recreational activities along a continuum with two distinct positions towards the poles (Figure 1.1). At one pole (numbered 4), there are those making a significant contribution to farm business viability, and therefore adjustment, relative to the other farm business activities. Towards the other (numbered 1), there are those making little or no contribution to farm business adjustment. Between these two poles there are a continuous series of different positions (including the illustrative positions numbered 2 and 3) reflecting the relative role of recreational provision within individual farm businesses.

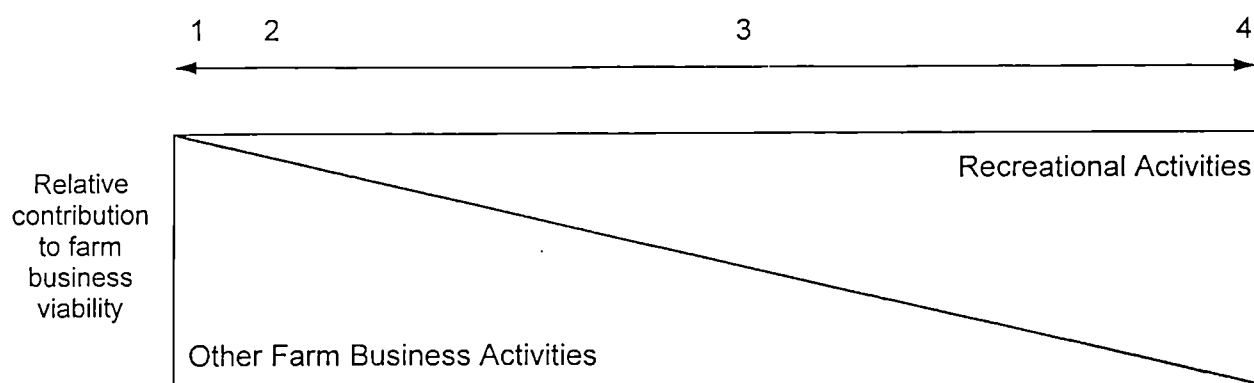


Figure 1.1. Continuum of the relative contribution of recreational activities to farm business viability.

Recreational activities towards the non-adjustment pole of the continuum (positions 1 and 2) contribute little or nothing to the adjustment of farm businesses, but instead fulfil largely non-economic, social, interest and altruistic motives. Two alternative examples correspond to position 1 (Figure 1.1): First, non-adopters who do not have any form of recreational provision; and second, recreational provision which is entirely incidental to farm business viability. In position 2 on the continuum, recreational provision is a very minor business activity. Examples of activities located at these positions might include field sports, provision for small local groups, provision for friends or educational visits for which no or very little charge is made.

Recreational activities located towards the adjustment pole of the continuum (positions 3 and 4) do not necessarily represent a new form of farm adjustment. The studies of DART (1974) and Bull and Wibberley (1976) both identified farms where recreational activities made considerable contributions to farm business incomes. However, the escalating pressures on farm businesses, highlighted in 1.1, mean that recreational activities are becoming an increasingly important source of income to some farm businesses. This is, to some extent, reflected in the emergence of more novel forms of recreation on farms, such as open farms, quad bikes and paintballing, and the development of many regional FAGs to advertise these activities (Ilbery 1998). Position 3 is analogous to a farm where recreational provision is pivotal to the continued viability of the farm business and has 'over-taken' other business activities, including primary agricultural production. Position 4 represents an extreme case where the business has adjusted to such an extent that recreational provision now represents the sole business activity - it has in effect diversified out of primary agriculture.

Although such a continuum has been observed before in relation to many farm-based diversification activities (for example, see Evans 1990 for farm-based accommodation), in these cases, the activities tend to be clustered mainly between positions 2 and 3 on the continuum with a few activities close to either pole. However, the provision of recreational activities is quite unusual because not only does it include many activities of this type, but it also encompasses very significant numbers of activities located close to the non-adjustment pole of the continuum (see DART 1974, Bull and Wibberley 1976).

This study is concerned with recreation in its entirety, similar to the 1976 study conducted by Bull and Wibberley, and not just recreational activities located towards the farm business adjustment pole of the continuum. It is argued that it is only possible to achieve a full understanding of the recreation phenomenon by considering it in this way. There are four fundamental reasons for adopting this approach:

- I. the nature of the continuum, and the distribution of recreational activities along it, means that it is extremely difficult to superimpose an artificial divide which splits those activities with a role in adjustment from those with no major role in adjustment;
 - II. one type of recreation may occur anywhere along the continuum. Indeed, farms may have more than one type of recreational activity, each located at a different point along the continuum. These two factors further complicate any split of recreational activities in to two groups, as in 1;
 - III. there may be movement along the continuum over time. This is particularly important for activities taking place towards the non-adjustment pole of the continuum which may represent a valuable testing ground for progression towards the adjustment pole;
 - IV. research grounded in political economy approaches (often holistic studies of pluriactivity) has tended to privilege recreational activities towards the adjustment pole of the continuum over the non-adjustment activities (Ilbery 1991, Bateman and Ray 1994, Ilbery *et al* 1996, Ilbery 1996). Activities located towards the non-adjustment pole may fulfil a variety of social, interest and altruistic functions for farm households and businesses and these are arguably just as important as those with a predominantly economic function. However, these activities relate far more strongly to the way farmers live their lives and the role of recreation as part of the culture of farming and consequently, are more suited to approaches and insights stemming from cultural geography.
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(ii). THE RECREATION TYPE DYNAMIC.

Previous studies of farm-based recreation have employed a variety of definitions each encompassing different combinations of recreation types (for a more detailed review see Chapter 2). Two key issues in relation to the definition of types of recreational activities, can be identified and it is necessary to address these at the outset in order to advance further empirical study:

- I. definitional distinctions within on-farm structural (non-agricultural) diversification (Ilbery 1991) are needed to distinguish farm-based recreation and tourism from other on-farm structural diversification options. This will provide a clearer framework within which to develop a definition of farm-based recreation. Such an approach is necessary because of the wide range of farm-based activities which could be considered to be recreational. This also begins to address the fragmented nature of previous definitions of individual structural diversification options;
- II. distinctions within farm-based tourism are needed to identify clearly differences between the tourism, accommodation and recreation terms.

A widespread failure to address these two conceptual problems has significantly reduced the analytic usefulness of much of the existing research into farm-based recreation.

To address these points, it is necessary to explore the position of farm-based recreation within structural farm diversification enterprises (those not concerned with agricultural production). The literature exhibits a widespread failure to distinguish consistently between farm-based tourism, accommodation, recreation and other structural diversification enterprises, especially added-value enterprises involving the retailing of agricultural and non-agricultural products.

Evans and Ilbery (1989:257) classified farm-based tourism as '*all activities which involve visiting farms for the purposes of accommodation and recreation*'. Accommodation was the focus of this study and, therefore, the definition of recreation was not expanded. Potentially, this definition creates a situation where a number of on-farm enterprises, such as pick-your-own (PYO), farm shops, craft shops, car boot sales and art galleries, which involve people visiting farms and could be identified as involving an element of recreation, could be classified as farm-based recreation. This is problematic because an overlap exists between the classification of product retailing enterprises and farm-based recreational activities. For example, Slee (1987) highlighted the recreational aspect of PYO. However, the recreational

component of added value and retail enterprises, as a whole, is unclear. The overlapping classification of some added value enterprises as farm-based recreation would also contradict the distinctions made by Ilbery (1991) who identified separate recreation, accommodation, added value and passive structural diversification options. The recreational classification of most of these retailing enterprises is highly subjective and is likely to depend on the individual perceptions of the consumer and provider. However, within structural diversification options it is possible to identify manufacturing/processing and retailing/marketing distinctions. Within the latter two further groups, product retailing and service retailing, are evident. These new distinctions are applied in Figure 1.2.

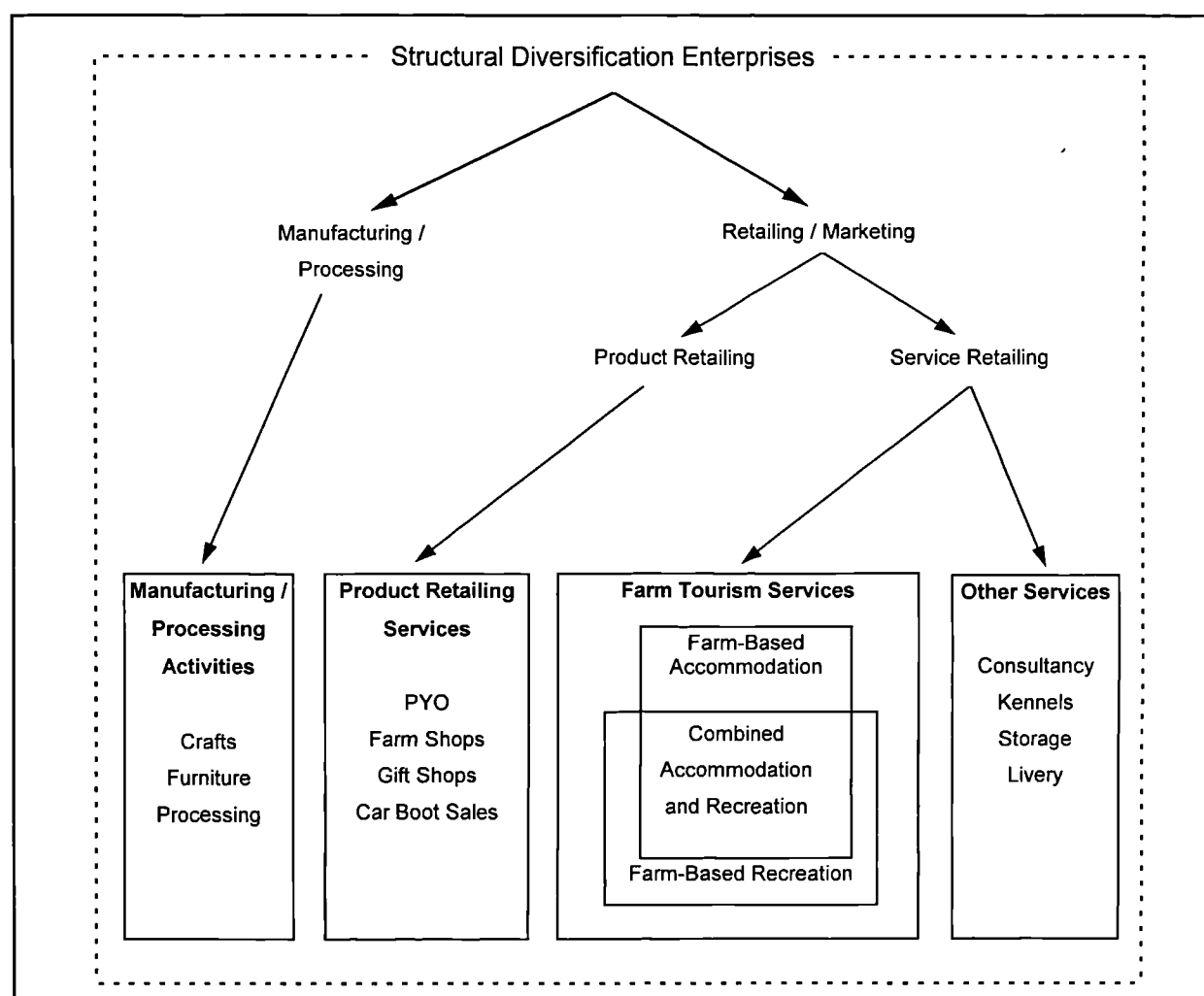


Figure 1.2. Classification of structural diversification enterprises.

These categories enable any definitional overlap between farm-based recreation and product retailing to be eliminated. A distinction can now be identified between on-farm product retailing (for example, a farm shop or PYO) and other services available on farms. In the case of product retailing, any recreational component is incidental to the business as

there is no explicit charge made for it, although the product charge may partially reflect any recreational component. In comparison, it is clear that where recreation is provided as a service, the recreation can only be 'consumed' on the farm and in some cases the recreational component is often charged for directly (as with an admission charge). Farm tourism can now be redefined as any activity attracting people onto a farm to 'consume' accommodation and /or recreational services, rather than retailing or other services.

Four observations can be made in relation to this conceptualisation. First, in many cases where the public are attracted onto a holding, it may be beneficial to have multiple or combinations of different manufacturing, service retailing and product retailing enterprises. Wider links with agricultural diversification can also be identified. For example, organic production may provide a product for processing and, in turn, retailing. Complementary links may also exist between on-farm manufacturing businesses which may produce products for retailing (as examined by Ilbery *et al* 1996). In cases where full integration exists on the same holding, it may be necessary to examine the integrated enterprise as a whole to determine the relative role of the recreational component. This serves to demonstrate the limits of this conceptualisation and highlights the need for 'farm-by-farm' investigation.

Secondly, specifically in relation to recreation, the classification of activities combining accommodation and recreation requires further explanation than previously provided (Evans and Ilbery 1989). Accommodation for guests on a farm may be completely incidental to consumption of farm-based recreational services on the same or other farms. In other cases, integration can be identified, for example, through farm activity holidays or simply farm holidays which offer a distinctive agricultural experience. Clearly, in cases where the recreational component is fully integrated, the use of the accommodation will depend on the associated recreation enterprise(s). However, farms supplying integrated facilities may also permit day visitors to use the same recreational facility and equally accommodation may be available without the recreational component. Only in situations where recreation is available as a fully integrated component, (for example if a charge is made, where this reflects both components) and is not incidental to residence, is it necessary to consider the integrated enterprise. In these cases, it is very important to remember that the recreational component may provide the lure necessary to attract people onto the holding. For example, where a charge is made it may contribute little to the profitability of the combined enterprises, any profit may instead be made from the accommodation. This strategy of combining accommodation and recreational enterprises to exploit niche markets in the face of competition was observed by Evans and Ilbery (1992a).

A third complication relates to the consideration that must be given to passive enterprises. An additional passive element may be identified as being a possible permutation which could be common to all structural diversification activities. This component encompasses those enterprises which take place on farms but are not under direct farm household control. In these cases, income is indirect from rents / leases and the farm household is not directly involved in their management. These may represent notable household responses which may reflect lack of expertise, motivation, income pressure, location or the influence of external individuals or organisations on the farm business.

A fourth group of features, which requires attention in this discussion, relates to the use of the term 'farm attractions' (See Chapter 2). This term is extremely problematic and two careful distinctions, which the literature fails to acknowledge, need to be made from the general term 'farm-based recreation':

- I. 'farm attractions' may include activities which are located on holdings without any agricultural income. In many cases, these activities involve livestock/animals, machinery or demonstrations associated with agriculture but are not located on working farms;
- II. on-farm product retailing enterprises are widely promoted by regional FAGs in agreement with Figure 1.2. For example, farm shops, PYO and rural crafts are regularly included in farm attractions marketing leaflets.

(iii). RE-DEFINING FARM-BASED RECREATION.

The preceding two sub-sections have articulated the issues surrounding the definition of farm tourism and farm-based recreation. It is now possible to put forward a new definition of farm-based recreation:

Farm-based recreation encompasses all those activities on a working farm which involve people using a recreational/leisure service provided by the farm other than, or in addition to, accommodation which can only be 'consumed' on the farm. It does not, in itself, involve the purchase of products or other services.

It is necessary to qualify two issues raised by this definition. The first relates to the fact that farm-based recreation may generate little or no direct income. In some cases, for example pigeon shooting, fox hunting, and rabbiting, there may be an associated tangential benefit for the farmer through pest control. In other cases, financially unimportant recreation may

represent an important method by which a potential market is explored before a financially viable enterprise is developed. The diversity of financial performance, and its associated motivations, is a dynamic which any definition of farm-based recreation must acknowledge. It is necessary, therefore, to consider recreational activities across the full spectrum of financial performance as they may encapsulate a wide diversity of important processes in the provision of farm-based recreation and together represent the total provision available.

Second, recreational activities are classed as farm-based if the holding on which they are located generates an arbitrary 5% of its income from mainstream agricultural production. Recreational activities on holdings where agricultural activities produce a minor proportion of income require consideration to determine if they represent possible strategies enabling entry to or exit from the agricultural industry. The Arkleton Trust (1992:326) observed that pluriactivity may '*assist [ing] the process of disengagement and exit from farming, especially on small farms*'. Evidently, farm-based recreation may provide an important route to enable farmers to leave agriculture but remain on the holding, and equally for new farmers to enter the agricultural industry. As such, this may represent a significant strategy in the restructuring of agriculture (the economic centrality conceptualisation) and, therefore, any definition of farm-based recreation should recognise this dynamic.

(iv). A FUNCTIONAL CLASSIFICATION OF FARM-BASED RECREATION.

The development of a classification of farm-based recreation helps to mobilize the definition of recreation developed and to distinguish between types of recreational provision. The literature has failed to generate a functional classification of farm-based recreational activities. Such a classification will enable the diversity of the farm-based recreation phenomenon to be investigated in a much more informative and analytical way than has been achieved in previous studies. Most have attempted to classify recreational activities according to groups of types, albeit within a variety of definitions of recreation (see Chapter 2 for a more detailed review). For example, the classification illustrated in Figure 1.3 distinguishes between: agricultural types, which can be identified as involving a distinctive farm or agricultural experience; and non-agricultural types, which encompass all those recreational activities which do not involve an agricultural element, on the basis of the nature of the recreational activity alone. Based on additional recreation type characteristics it is possible to add further levels of detail to the classification illustrated in Figure 1.3. For example, educational, residential and specific resource sub-groups can be identified. However, the resultant categorisations are unlikely to be useful for research at a farm-level. This is because they do not necessarily reflect enterprise level factors and combinations of

factors, such as the type of provision, resource requirements, aspects of establishment, marketing and day-to-day management.

Agricultural	Non-Agricultural
<p>Museums</p> <p>Farm Trails</p> <p>Farm Visitor Centre</p> <p>Demonstrations</p> <p>Educational Facilities</p> <p>Working Farm Tours / Tractor Rides</p> <p>Rare Breeds / Wildlife park / Pets' Corner</p> <p>Farm Open Days</p> <p>Farm Shows</p> <p>Lambing / Shearing Days</p> <p>Ploughing Matches</p> <p>Sheep Dog Trials</p> <p>Traction Engine / Tractor / Vintage Machinery Rallies</p> <p>Birthday Parties</p>	<p>Game Fishing</p> <p>Access Agreements</p> <p>Coarse Fishing</p> <p>Riding</p> <p>Riding Competitions</p> <p>Shooting</p> <p>Motor Sports</p> <p>Motor Sport Competitions</p> <p>Indoor Sports Facilities</p> <p>Water Sports</p> <p>War games/PaintBalling</p> <p>Facilities for Model Clubs</p> <p>Village Sports Pitches</p> <p>Golf Course</p> <p>Adventure Play Areas</p> <p>Picnic Site</p> <p>Restaurant / Teas / Coffee Shop</p> <p>Nature Reserve / Nature Trails</p> <p>Historic Battle Re-enactments</p>

Figure 1.3. Examples of the two main components of farm-based recreation.

Specifically, five main limitations can be identified with classifications based on type/outcome in relation to farm business level investigation. First, enterprises with very different characteristics may be classified as the same type. Secondly, they make no distinction in terms of the form of provision. The wide range of farm-based recreational activities means that, unlike many other farm diversification ventures, the provision for these activities may exist in a range of forms, including short term events, recreation open to the public without arrangement, recreation for members of private clubs and syndicates, and recreation for personal use. Previous research has failed to distinguish between these categories and consequently it is often unclear as to the true nature of these activities. In other cases, research has tended to concentrate on major providers which are open to the general public, such as farm attractions. Thirdly, such classifications do not identify the range of different management options that may be utilised by the same enterprise. For example, angling waters may be managed or unmanaged. Management (where undertaken), day to day operations, organisation and marketing may be controlled by the farm household or, alternatively, by syndicates or individuals who lease/rent the fishing rights (the passive

distinction identified previously). Fourthly, the system can only be applied to individual recreational activities and not to multiple enterprises, which may represent an important farm-business strategy. In this situation, each enterprise must be classified separately, which itself questions the value of classification which is not flexible enough to classify effectively inter-relationships. Fifthly, classifications by type represent recreation as a static outcome rather than part of an evolving process. Recreational provision, or indeed other forms of farm adjustment, have not been considered as a process before.

This basic classification may provide a useful analytical tool for examining the spatial distribution of farm-based recreational activities in England and Wales according to the type of provision. However, further development based on recreation type is unlikely to inform specific household level investigation aimed at identifying the reasons behind the initiation of different farm-based recreational activities. Such an observation is common to all 'classifications by type'.

For these reasons, a more productive classification attempts to reflect some of these enterprise level factors according to the nature of the availability of the activity. It is possible to identify five distinct categories of provision for recreational activities. These are:

- I. activities that are open to the general public without booking;
- II. activities that are available to the general public, but require booking / arrangement;
- III. activities that are only available to members of private groups / syndicates / clubs;
- IV. activities that are only available for personal use (family, friends and employees);
- V. short term recreational events, occurring for less than 28 days a year.

These distinctions enable different types of provision to be disaggregated, thus avoiding confusion as to the nature of the recreation and permitting a more analytical approach than has been possible to date. This is especially true where facilities for personal use are involved. Farms have an almost unique potential for providing recreation to the wider market whilst also supplying recreation to family members at the expense of this wider market. This contradiction has often been overlooked in the literature, although the study by Bull and Wibberley (1976) did include coverage of some provision for personal use. However, recreation for personal use may be an important component of total provision and also provides a useful indicator of potential for certain types of recreation.

The first classification presented identifies broad distinctions which can be applied to all enterprises (Figure 1.3). This permits comparisons between agricultural and non-agricultural types of recreation. The second classification employs categories of provision, instead of the type of recreation, allowing more important enterprise level factors to be differentiated. These dual classifications are robust and suitable for both general and specific purposes. Indeed, they can assist in the allocation of recreational activities to groups for analytical purposes.

Used individually or in tandem, the classifications provide a useful platform from which to approach research into farm-based recreation. Given the diversity of possible types of recreational activities which may occur on farms, coupled with the different categories of provision possible, they provide a useful analytical tool for understanding the initiation and development of farm-based recreation. They are also likely to be of significant value to inform and structure the future execution of empirical research. Ultimately, they may provide a framework to which empirically informed classification can be applied, facilitating the sensible integration of theoretical and empirical approaches.

2. RESEARCH INTO PLURIACTIVITY, FARM-BASED TOURISM AND RECREATION.

2.1. Introduction to Pluriactivity.

There has been a continuing academic debate surrounding the phenomenon of farming in conjunction with other activities contributing to farm household income, whether on- or off-farm. Studies by Gasson (1983, 1986, 1987, 1991); Fuller (1990); Lund (1991); Bryden *et al* (1992); Gasson and Errington (1993) and Evans and Ilbery (1993) represent a selection of a substantial literature. The major components of this debate are illustrated in Figure 2.1 which provides a guiding framework which will be used to explore the position of farm-based recreation within pluriactivity. The recognition of the fundamental inter-relationships and overlaps between these different areas has resulted in the evolution of a more integrated and holistic approach to definitions that encompass all alternative sources of income for farm family households. The umbrella term 'pluriactivity' has emerged to describe this wide range of activities (Shucksmith *et al* 1989).

Farm-based recreation is clearly just one pluriactive option. However, it can be identified in three different 'levels' of research: pluriactivity; farm diversification; and farm tourism. It is necessary, therefore, to examine recreation in each of these levels. The following section (2.2) will seek to explore research on pluriactivity. Section 2.3 will concentrate on research which focuses specifically on farm-centred diversification options, a widely identified subgroup of pluriactivity. The subsequent section (2.4) will then focus on even more specific research which covers only farm-based tourism. The purpose throughout these sections is twofold: to ascertain and evaluate the extent and way in which recreation is covered within each of these definitional levels and; to inform subsequent investigation of any inter-relationships which exist between farm-based recreation and other forms of pluriactivity.

Four main themes can be identified within research into pluriactivity:

- (a). definitions and classifications;
- (b). geographical incidence;
- (c). economic contribution to the farm household;
- (d). factors influencing its development.

The first three themes can be applied at each of the three levels of investigation and will be used to structure sections 2.2-2.4. Theme (d) is considered separately in section 2.5 as it forms a critique.

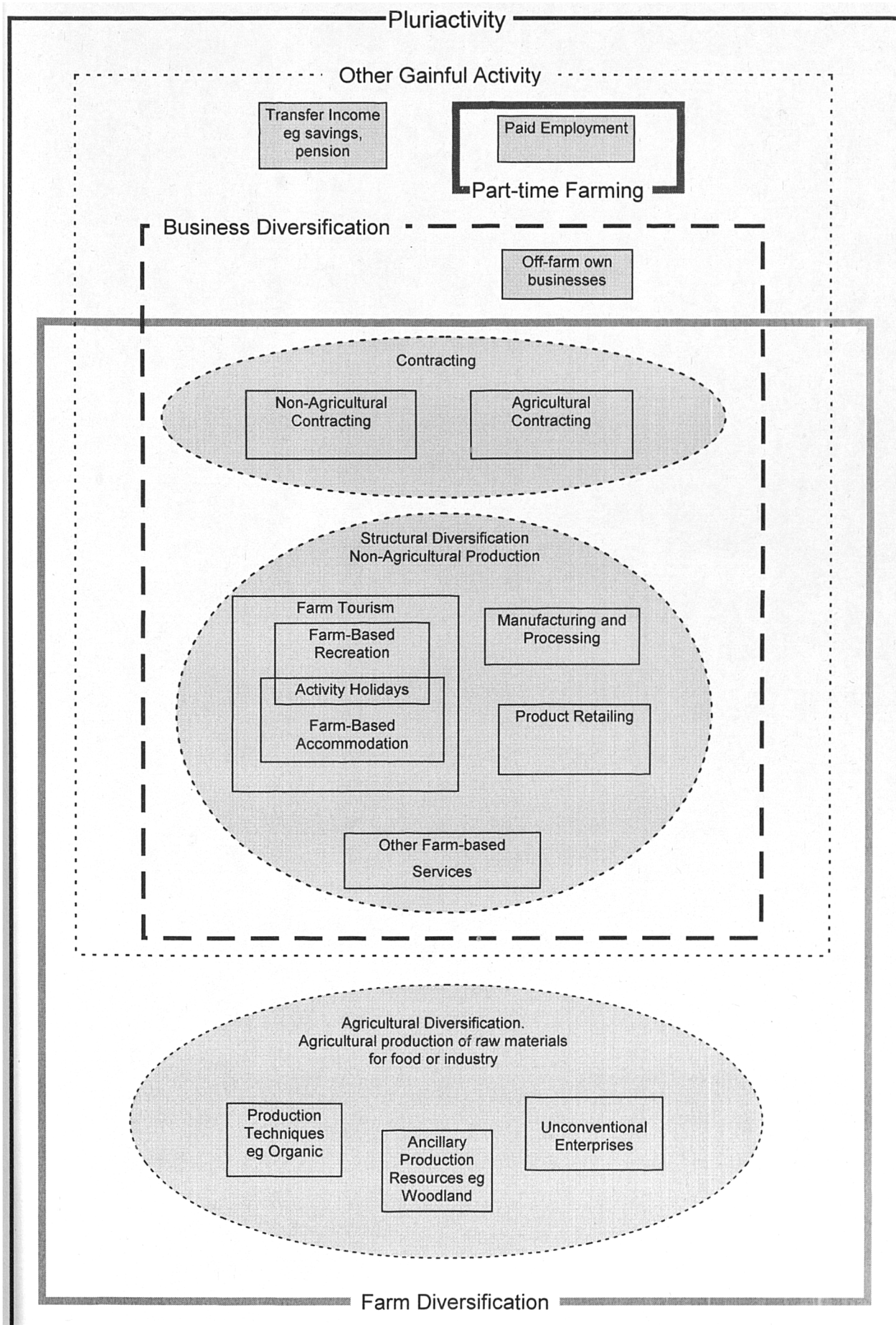


Figure 2.1. An overview of existing conceptualisations of pluriactivity.

2.2. Pluriactivity.

The pluriactivity debate has been fueled by definitional imprecision when classifying sub-components. With many authors contributing to the debate, each has generated specific definitions and concepts relating to their own areas of research interest. Examples include those by Ilbery (1988, 1991) investigating farm-based diversification and Gasson (1986, 1987) who investigated 'other gainful activities' (OGAs) and 'part-time farming'. The distinctions identified have frequently been based on types of farm-centred or off-farm activities and classifications according to resource use (land, labour and capital). These approaches have led to a variety of definitions, each describing a particular combination of these components and resources. Evans and Ilbery (1993) provided a comprehensive review of general terms, but much overlap exists within the broad divisions identified, as Figure 2.1 illustrates.

(i). DEFINITIONS AND CLASSIFICATIONS OF PLURIACTIVITY.

Various definitions of the term pluriactivity have been put forward. For example, Bateman and Ray (1994:2) defined pluriactivity as *'the participation by any member of the farm household in income earning activities that contribute to maintaining the viability of the household'*. This definition excludes unearned income sources and raises a further definitional problem associated with the consistent application of the term 'farm household'. Similarly, Dalton and Wilson (1989:2) in a broader classification excluded unearned income. They defined pluriactivity as *'all those forms of unusual activity that take place on the farm and which have come to be known collectively as alternative enterprises, and any source of income which requires any member of the resident farming family to work elsewhere - 'off-farm jobs'. Other forms of income such as private stocks and shares or State benefits are not included as they do not form part of the earned income of the farming household'*.

According to Gasson (1990), pluriactivity refers to farm households who generate income according to one of two broad strategies:

- I. an economic centrality change where the proportion of off-farm income entering the household is increased;
- II. a farm diversification change where unconventional use is made of on-farm resources.

Thus, farm diversification is farm centred, restricted to the redeployment of capital and/or labour and land resources within the farm business, whereas pluriactivity includes income

generated away from, as well as on, the farm. Terms such as OGAs, farm diversification and part-time farming have, therefore, been subsumed under the wider pluriactivity term (Shucksmith *et al* 1989; Fuller 1990 and MacKinnon *et al* 1991).

Pluriactivity encompasses the combination of farming with other work. This combination has been described using a range of different terms. Probably the most widely used are 'OGA' and 'part-time farming'. Gasson's (1983) classification of farmers' gainful activities identified three types of non-agricultural income, namely other off-farm business interests, other sources of off-farm income, and non-agricultural farm-based income. There is clearly a large overlap between this classification and that of farm diversification when considering non-agricultural farm-based income sources, as can be seen in Figure 2.1.

A major difficulty occurs when attempting to explore the various contributions of OGAs to the farm household. This again raises definitional questions concerning the farm household as an analytical unit. It is necessary to consider the household as a unit contributing to the on-going farm business. However, there are problems establishing the extent to which all household members make a business contribution. The usefulness of the term OGA is limited as it is not based solely around labour use and neither is it restricted to farm-based nor off-farm activities. Consequently, the useful on-/off-farm distinction is lost.

The term 'part-time farming' has developed based entirely around labour use. Various definitions have been put forward with regard to farms, farmers and farming. Gasson (1988a:1) defined part-time farming as *'the combination of farming with other paid work, irrespective of the amount of time which the farmer spends on the holding. Farms on which it occurs are called part-time farms and the people involved, part-time farmers, families or households'*. This terminology has created many definitional problems, as shown by Lund (1991) who identified two distinct ways in which the term part-time farming could be applied to agriculture. First, farm holdings may be described as being part-time on the basis of their business size. Holdings whose estimated labour / income requirements are below a given threshold level would be classified as part-time. Secondly, farmers and the farms they occupy, where the farmer is not wholly engaged in running the farm, can be classified according to the amount of time spent working on the farm. This normally implies that they have some other gainful occupation and introduces the concept of on-farm unwaged OGAs into the part-time farming classification. It also raises questions of what constitutes paid work and which household members are included in the definition.

The term part-time farming has attracted heavy criticism as it is indistinct. The term implies a limited commitment to agriculture by the farm family, suggesting that they operate a smaller unit, are less efficient and may be on their way out of agriculture. For the vast majority of cases, this is not so (Fuller 1990, Lund 1991). Gasson (1991) commented that a term is needed to convey the sense of farming being combined with other efforts by a farm-based household in order to make a living. Alternatives put forward have included multiple job holding and rural pluriactivity. However, these are imprecise as they fail to identify farming as one of the activities. Bryden *et al* (1992) put forward the term 'pluriactive farm household' which is similar to Lund's (1991) suggestion of pluriactive farming. Both these terms convey the sense of a household engaged in farming with more than one activity. Again these terms associate pluriactivity with the labour component of the farm household. However, applied within the wider pluriactivity concept, they fail to distinguish between on- and off-farm pluriactivity, a further handicap for research.

Depending on their precise application, these different definitions can result in the same farm household being placed in a variety of classifications. Lund (1991) gave the example of a very large farm, and the farmer operating it full time, being described as part-time because some other member or members of the farm household had a form of gainful employment. Further, it has been observed that the classification is likely to vary with the family life cycle. Consequently, the term is of limited analytical use. According to Lund (1991), the farm household itself may be described as pluriactive if any one of its members has some other gainful occupation. The classification of the farm as part-time, however, requires that these criteria relate to a given set of persons. In an attempt to avoid confusion over terminology, Lund (1991) suggested that the term part-time farmer be reserved for those working less than some stipulated length of time on the farm. This classification could then be applied to individuals, with terms such as dual job holder having other gainful activity or pluriactive farmer introduced to describe other activities. This is in agreement with Gasson (1991) who describes farmers with other gainful occupations as dual or multiple job holders. However, it illustrates a failure to relate to the wider pluriactivity concept, limiting pluriactivity to OGAs and excluding on-farm agricultural diversification.

As suggested in Chapter 1 the majority of farms in England and Wales operate as family concerns and, therefore, it is usually the farm household whose income needs have to be met and whose labour is available to be deployed, on- or off- the farm to meet those needs (Gasson and Errington 1993). For these reasons it is useful to consider the definition of the farm family household.

The family farm and family farming are terms which are used widely, yet they prove surprisingly difficult to define. Generally, they have been regarded as a farm which is owned and operated by a family which may include one or more generations. Gasson and Errington (1993:18) put forward a detailed definition of the farm family household which provides a useful framework for investigating the farm family business. According to these authors, the farm family household displays six distinctive characteristics:

- I. business ownership is combined with managerial control in the hands of the business principals;
- II. these principals are related by kinship or marriage;
- III. family members (including these principals) provide capital to the business;
- IV. family members, including business principals, do farm work;
- V. business ownership and managerial control are transferred between the generations with the passage of time;
- VI. the family lives on the farm.

Using these criteria, family farms are clearly the dominant agrarian business structure in the UK, well over 90% of UK farm businesses are family businesses, and 75% are run by members of just one family (Gasson *et al* 1988).

Numerous problems still remain when investigating the farm family household. For instance, because of the difficulties of collecting income data, Gasson (1990) found that it was more realistic to confine attention to farm occupiers and their spouses. Dalton and Wilson (1989) illustrated the difficulty of applying advanced definitional concepts, such as those of Gasson and Errington (1993), in practice. They found that most off-farm jobs were not held by the principal farmer. The major advantage of having a son or daughter in off-farm employment was not derived through their direct financial input, but rather through the reduction in the number of household members who were dependent on the farm for their income.

Attempts have been made to establish the share of total business income earned from agriculture (the economic centrality of farming) compared with the income generated from other sources (Gasson 1986; Marsden *et al* 1986a; Shucksmith and Smith 1991; Evans and Ilbery 1993). However, because of the complex nature of the farm household these have largely failed to elucidate the ways in which on-farm and off-farm opportunities are mixed within particular farm families.

The terms OGA and part-time farming have been primarily associated with individuals within the labour regime of the farm household, and not to the farm household as a unit. This failure to distinguish between classifications of individuals and the household has greatly limited the analytical use of these terms in pluriactivity research. The tendency to focus on the operator instead of the farm family or the household is an associated problem. It implies not only that the work status of the operator is a predictor of farm status, but that the operator is the key element in family work patterns. The contribution of other members of the household who work on the farm and/or who have off-farm jobs are diminished in this approach.

In reality, part-time farming can perhaps best be used to describe the relative time commitments between mainstream agriculture and other activities by individual household members. Therefore, rather than a grouping within pluriactivity describing the activity itself, such as OGA, part-time farming describes the allocation of labour resources between mainstream agriculture and OGAs. For this reason, Figure 2.1 should not include part-time farming as it is best used to describe the relationships between activities and does not provide a useful analytical distinction for classification. Used in this context part-time farming could then be applied to all aspects of pluriactivity. Currently, its application is limited to off-farm activities involving farm labour resources. The term might be employed usefully to examine the labour component of more complex on- or off-farm activities involving a mix of household labour, with or without land and capital resources.

(ii). GEOGRAPHICAL INCIDENCE OF ON- AND OFF-FARM PLURIACTIVITY.

Research utilizing the pluriactivity concept to elucidate general levels of pluriactivity has, of course, included farm tourism, and therefore recreation. Unfortunately, the variety of definitions used in studies of pluriactivity and the lack of a consistent analytical framework mean that accurate comparisons between different studies are extremely difficult.

Edmond *et al* (1993) reported a level of 67% household pluriactivity in Scotland. This was in the form of either a non-farming enterprise on the farm and / or at least one household member with an off-farm job. This study did not include transfer income, or agricultural production diversification. Disaggregated, 55% of households had off-farm employment, 21% non-farming enterprises on the farm and some exhibited both. This is broadly in agreement with Bateman and Ray (1994) who used a wider definition of 'pluriactivity'. Examining the extent of 'pluriactivity' in Wales, they found virtually all (93%) of farm

households were pluriactive in the sense of having some income from non-conventional sources. These authors found 69% had earned income from sources other than agricultural work on the home farm and 73% had unearned/transfer income. However, neither of these studies disaggregated on-farm pluriactivity sufficiently to identify tourist activities, or indeed recreation.

In the London metropolitan green belt, Marsden *et al* (1986a) found that between 1970 and 1985 the number of alternative income sources for the farms nearly doubled, with a substantial increase by 1985 in the 'other sources of off farm income' category (See Table 2.1). In the 1985 sample, farms were also more likely to have more than one type of non-agricultural income source with 48% of farms obtaining income from at least two separate types of source in combination. This broader definition including all off-farm business interests gives similar levels of participation (1985) for off-farm income to Edmond *et al* (1993). This study did not present a more detailed breakdown of on-farm pluriactivity, although once again recreational activities are included in this category.

	% FARMS		
	1970	1977	1985
Non-agricultural sources of income			
Other off farm business interests	22	25	29
Other sources of off farm income	23	28	56
Non agricultural farm based income	27	36	41

Table 2.1. Changes in the proportions of farm households in the London metropolitan green belt with non-agricultural sources of income. (Adapted from Marsden *et al* 1986a:275).

The Arkleton Trust (1992) produced a typology of pluriactivity, using a cluster analysis of key variables, which captured the existing structural situation of farm households in the European Community (EC) in 1987 (See Table 2.2). They identified 'pluriactive' types to account for 37% of the farms surveyed. Off-farm work was again identified as the most frequent mode of pluriactivity. Farm-based diversification, including farm tourism, was identified as a key component on only 2% of the surveyed farms. This level, which is significantly lower than that reported in many UK studies, may reflect the technique of analysis which identified those with a 'high' dependence on diversification rather than the simple incidence of diversification, the selection of survey regions and/or the EC wide nature of the findings.

CLUSTER AND LABEL	CHARACTERISTICS	%
Monoactive Types	Types with very high dependence on agricultural income	38
Very large producers	Very large business size. High dependence on agricultural income. Low pluriactivity. Nearly all use hired labour. High incidence of debt. Highly educated. High incidence of young farmers.	3.1
Capital intensive family farms	Medium to large business size. High dependence on agricultural income. Low pluriactivity. Over half with hired labour. High incidence of debt. High incidence of younger farmers.	22.3
High family labour input	Very high commitment of family labour. Small to medium business size. High dependence on agricultural income. Low pluriactivity. Low incidence of debt.	12.4
Pluriactive types	Types with high off farm work or para-agricultural activity and income.	37
High farm-based diversification	High involvement in farm-based diversification. Small to medium farm business size. Medium to low dependence on agricultural income.	2.0
Man with off-farm work	Very high dependence on income from off farm work - by the man and sometimes also with other family, but rarely the woman. Medium to low dependence on agriculture. High incidence of younger farmers. Small farm business size.	16.1
Woman with off-farm work	High dependence on income from off farm work - by the woman and sometimes also the man. High incidence of younger farmers. Small to medium farm business size.	6.6
Other family with off farm work, with man or medium sized farm	High dependence on income from off farm work - by other family members and sometimes also the man but not the woman. Small to medium farm business size. A half use hired labour.	4.2
Other family only with off farm work, retired or small farm	High dependence on income from off farm work- by other members of the family but rarely the man or woman. Small farm business size. Older farmers. Two thirds have some social transfer income.	8.3
Retirement households	High dependence on social transfer income. Older farmers. Medium to low dependence on agricultural income. Low pluriactivity. Small farm business size.	21.4
Residual Category	Cases allocated to other very small clusters with few cases owing to extreme values on one or more clustering variables.	3.4

Table 2.2. Typology of EC pluriactivity. (Arkleton Trust 1992:289).

(iii). ECONOMIC CONTRIBUTION TO THE FARM HOUSEHOLD OF ON- AND OFF-FARM PLURIACTIVITY.

This sub-section aims to provide an overview of the economic contribution of pluriactive options. This should allow the relative importance of on-farm pluriactive options, including farm-tourism and farm-based recreation, to be gauged in comparison to off-farm options.

A survey by Bateman and Ray (1994) in Wales revealed that only a minority of farm households did not have another source of income, even though agriculture remained the primary income generating activity. Of these other sources, off-farm work was the most significant type. A degree of differentiation was also noted between household members and the type of income generating activity. In terms of time, work on the home farm took 68% of household Full Time Equivalents (FTEs), bringing in 69% of their income. The income from sources off the farm was divided, 13% being unearned/transfer income, with

17% earned from off-farm activities. Gasson (1988a) reported similar findings, concluding that on-farm pluriactivity contributes on average much less to income than does off-farm employment.

An increasing reliance on non-agricultural sources between 1970 and 1985 was demonstrated by Marsden *et al* (1986a)(see Table 2.3). However, agricultural sources still remained the primary source of income for most farm households. A similar reliance on agricultural sources has been reported by Shucksmith (1993) in the Grampian region of Scotland. In 1987, agriculture contributed on average 61% of farm household income. By 1991 this had grown to 64%, 14% of which was agricultural support payments. Again, off-farm employment was a significant source contributing, on average, 21% of household income. Table 2.4 provides a detailed analysis of how this was divided.

Percentage of income from non-agricultural activity.	PERCENTAGE OF FARMS		
	1970	1977	1985
None	45.8	36.4	20.0
1-5	7.2	9.4	10.0
6-50	24.0	29.4	29.4
Above 50	24.0	24.8	40.6
TOTAL	100	100	100

Table 2.3. Percentage of income from non-agricultural activity in the London metropolitan green belt (Marsden *et al* 1986a:275).

% OF HOUSEHOLD INCOME				
INCOME SOURCE	ALL FARMS	OFF-FARM SOURCES AS A % OF TOTAL HOUSEHOLD INCOME		
		<10%	10-50%	>50%
FARM-BASED				
Agricultural Sources	51	72	65	11
Para-agricultural Sources ¹	12	19	0	7
Other Farm-based Activities	6	8	3	1
NOT FARM-BASED				
Off-farm Employment	21	1	16	58
Social Transfer Payments	10	0	15	23
Other Investments	0	0	1	0
TOTAL	100	100	100	100

Table 2.4. Off-farm income as a share of household income (Shucksmith and Smith 1991:346).¹Equivalent to agricultural diversification identified in Table 2.5 (Farm tourism is classed as 'Other Farm-Based Activities').

The dominance of off-farm employment, where off-farm sources account for greater than 50% of household income is particularly evident. In contrast, other farm-based activities, including recreation, contributed on average 6% of household income. Consistently, therefore, it has been found that off-farm employment is both the most widely occurring form of pluriactivity and the most significant economically (with the exclusion of transfer income). However, although forming a prominent research interest the importance of this alternative income source is not balanced by the relative attention afforded to it in the literature.

(iv). PLURIACTIVITY RESEARCH AND RECREATION.

In theory, all the pluriactivity research includes recreation, yet levels of recreational provision are very rarely elucidated. The level of detail employed to identify sub-groups of pluriactive activities determines whether it is possible to identify recreational activities separately. The majority of studies do not progress beyond a simple distinction between off-farm pluriactivity and on-farm pluriactivity and do not identify recreational activities (let alone individual types of recreation). In addition, the extent of inclusion of certain types of recreational activities within pluriactivity, especially those which fulfil primarily non-economic objectives, is not always clear.

The fact that the term 'pluriactivity' simultaneously has advantages and disadvantages associated with its use is clear. The pluriactivity concept has three primary advantages for research. Evans and Ilbery (1993) noted that it could be used to help identify the causal mechanisms creating particular farm household strategies as opposed to documenting the outcomes of such strategies. For instance, as Bryden *et al* (1992) observed, it highlights the ways in which rural policy and not just agricultural policy influences the farm business. Indeed, some of the most recent research has revealed the importance of socio-economic and locational influences (See for example, Shucksmith and Smith 1991, Edmond *et al* 1993, Bateman and Ray 1994, Edmond and Crabtree 1994). A second major strength of pluriactivity is its inclusion of all aspects of agricultural and non-farm work undertaken by all farm household members, including self-employment, waged labour and unwaged payments, on- or off- the farm. Farm diversification is a narrow concept restricted to farm-centred activities capable of generating income. In contrast, pluriactivity ensures that a wider view of important farm household strategies can be obtained (Evans and Ilbery 1993). The third advantage of the use of the pluriactivity concept is that it permits the examination of farm-level combinations of different pluriactive options, although this has rarely been undertaken in any detail. For example, as Ilbery (1991) noted, farms with off-farm pluriactivity can still exhibit on-farm pluriactivity and it should also be observed that income

generated off-farm may be used for on-farm activities.

Simultaneously, the term has three significant disadvantages. First, the term has not been consistently applied, for example, Bateman and Ray (1994) excluded unearned income. This negates the advantages of a holistic approach. Similar observations also apply to the way in which different studies classify activities which generate very small financial contributions (which may be particularly true in relation to recreational activities), and the way in which the term 'farm household' is applied. Secondly, the general use of the term pluriactivity has failed to add specificity to research into alternative farm household income sources. The development and use of the concept of pluriactivity has led to the subsumed terms being overlooked in recent research. For example, pluriactivity often fails to make any analytical distinction between different farm-centred diversification options, and has failed to distinguish between household members working as paid employees for other people and those who set up and run their own businesses on- and/or off- the farm (Gasson 1987, Ilbery *et al* 1996). Investigation of pluriactivity as an integrated phenomenon has necessarily been superficial because of the expansive nature of the subject. This highlights the value of specifying individual components which can play a useful role in structuring and specifying the pluriactivity concept and led Evans and Ilbery (1993:945) to comment '*further research into specific options can contribute to an understanding of the dynamics of households engaged in pluriactive strategies.*' Thirdly, the use of individual terms, whilst offering a realistic target for research, has often resulted in a focus on individual categories at the expense of any reference to the farm-level combinations of different categories of pluriactivity. A notable exception is the work by Edmond and Crabtree (1994) who considered farm-level combinations of three different types of pluriactivity: tourist enterprises; non-tourist enterprises and paid off-farm employment.

2.3. Farm Diversification.

This section considers research at the farm diversification level which includes all aspects of farm diversification and, therefore, necessarily includes recreation. More detailed studies specifically of tourism/recreation are discussed later (see Section 2.4). Other specific studies of non-tourism elements of diversification are not discussed.

Farm diversification is a major component of the pluriactivity concept and it is within this that farm-based recreation, the specific focus of this work, is located. Diversification has become a popular term in recent years. It has been identified as one possible adjustment strategy that farm businesses can follow to overcome falling incomes and, as such, has attracted

considerable research attention. Many studies concentrate specifically on diversification or its individual elements.

Various attempts have been made to define farm diversification, as reviewed by Ilbery (1991). The term has rarely been consistently defined or conceptualised and this has created numerous problems when attempting to assess the extent of farm diversification and compare the results of different research. The annual agricultural census currently fails to report information on farm diversification, the range of diversified projects undertaken and the type of farmers and farms involved (Ilbery 1991). Many studies are becoming dated or are of a preliminary or general nature (for example, see McInerney *et al* 1989).

(i). DEFINITIONS AND CLASSIFICATIONS OF FARM DIVERSIFICATION.

The most precise definition of farm diversification is that given by Slee (1987:2); *'Those enterprises taking place on predominantly agricultural proprietorial units which (a) are not based on primary production of food and fibre and / or (b) fall outside the price support mechanisms of the Common Agricultural Policy.'* This definition excludes off-farm sources of income from other economic activities, although it is recognised that they may provide the necessary capital for on-farm diversification. In addition, changes in the targeting of CAP support measures underline an inherent weakness of this definition.

In contrast, McInerney *et al* (1989:6) stated that the term is not amenable to precise definition. *'Diversification implies the adoption of income earning activities outside the range of conventional crop and livestock enterprises associated with agriculture'*. The National Farmers Union (NFU) (1986:1) commented that farm diversification refers to the development of non-traditional farm enterprises and covers *'a multitude of situations which can only be adequately defined as doing different'*. Similarly, Evans and Ilbery (1993) identified the expansive nature of farm diversification which has made precise definition difficult. Ilbery (1988) observed that it involves a diversion of resources (land, labour and capital) which were previously committed to conventional farming activities. However, this implies that farm diversification does not include activities employing resources which are surplus, or not utilised, for agriculture but available to the household.

More restrictive definitions have been presented by Carruthers (1986), who included a long list of alternative crop and livestock enterprises but excluded value added activities, and by Griffiths (1987:2) who restricted it to adding value via direct marketing and processing. Griffiths argued that unconventional crops and livestock were not diversification, defining the

term as *'farm-based activities not directly concerned with producing crops or livestock and which involve marketing contact outside the agricultural industry'*.

Ilbery (1991) developed a classification of farm diversification options, identifying agricultural and business structure forms of diversification (see Table 2.5). Agricultural forms are production-oriented, examples include farm woodland, organic farming, and unconventional crops and livestock. Business structure forms are geared outwards from the farm and towards the public. Hence, marketing is as important as production. Examples include farm-based tourism (accommodation and recreation) and adding value by either the processing and/or direct marketing of food. This distinction implies that the unconventional products of agricultural diversification do not require different marketing techniques to conventional agricultural products. Considerable confusion exists, as illustrated by Table 2.5, with organic enterprises, which could be classified as unconventional or added value, and with agricultural contracting which is farm-based but occurs on someone else's farm and could, therefore, be classified separately. A number of links and overlaps between the two categories can also be identified, for example, farm woodland utilised for both timber and recreation. Similar reservations can be identified in the case of the production of pheasants and fish for recreational enterprises. The classification of these remains unclear.

A general distinction based on non-traditional or unconventional enterprises on the farm has been implied in many definitions. Evans and Ilbery (1993) noted this recurrent theme, but made no attempt to define non-traditional and unconventional. It is clear that these terms will be subject to geographical variation, for example vines (Table 2.5) would not be considered an unconventional crop in many other parts of Europe, indeed they receive CAP funding in many areas. Equally, the development of new crop varieties or livestock breeds, or changes in CAP regimes, over time may result in other changes. This is illustrated, in Table 2.5 with the categorization of linseed as an unconventional crop. However, this flexibility may represent an inherent strength of these definitions.

The classification of labour within the farm diversification concept is particularly problematic. Conceptualisations of farm diversification excluding the labour resources of the farm household have been criticized by some researchers (Shucksmith *et al* 1989, Lund 1991). However, the inclusion of farm household labour resources in definitions of farm diversification would result in the incorporation of off-farm occupations into the definition. This would then negate any analytical distinctions achieved by classifying the labour component of the farm household separately. It also fails to distinguish between on- and off-farm activities. There has been a general preference to include off-farm occupations of farm

family members within the pluriactivity concept but exclude them from the farm diversification concept (see Gasson 1987 and 1988b, Dalton and Wilson 1989). Ilbery (1991) restricted his definition of farm diversification to farm-centred activities and excluded income generated from, and labour involved in, off farm activities.

Business Structure Diversification	Agricultural Diversification
<p>Accommodation bed and breakfast self-catering camping and caravan sites</p> <p>Recreation (formal / informal) farmhouse teas cafe demonstrations open days farm zoo/children's farm water/land based sports war games horsiculture craft centres nature trails reserves country wildlife parks combined activity holidays</p> <p>Adding value to farm enterprises direct marketing farm gate sales farm shop delivery round PYO cheese ice cream/yogurt cider/wine jam/preserves potato packing flour milling selling skins, hides, wool</p> <p>Passive diversification lease of land leasing of buildings</p>	<p>Unconventional enterprises</p> <p>Crop products linseed teasels evening primrose borage triticale fennel durum wheat vineyards organic production</p> <p>Animal products fish deer goats horses lamoids sheep milk ostriches organic production</p> <p>Farm woodland energy forestry amenity recreation wildlife conservation timber</p> <p>Agricultural contracting for other farmers for non-agricultural organisations</p>

Table 2.5. Business structure and agricultural diversification. (Adapted from Ilbery 1988:36, 1991:210)

The confusion relating to the overlap between farm diversification and OGAs, illustrated within Figure 2.1, has subsequently been addressed with the development of the term 'business diversification'. This fits within the wider concept of pluriactivity and, according to Ilbery *et al* (1996), relates specifically to one or both of the following activities established and run by any member of the farm household who is also involved in agricultural work on the farm:

-
- I. on-farm, non-agricultural, businesses (such as a craft shop or blacksmith);
 - II. off-farm businesses (such as a saddler, wine merchant or hairdresser).

Business diversification incorporates the structural component of farm diversification and off-farm business interests, but not part-time farming. However, as is evident from Figure 2.1, and observed by Ilbery *et al* (1996), in some cases there may be a close relationship between agricultural and business ventures. For example, non-agricultural businesses may be involved in either the sale of agricultural produce on- or off- the farm, or in the case of contracting, the use of farm resources off-farm. Ilbery *et al* (1996) observed that, although related to agriculture, they can be included as types of business diversification.

In summary, a distinction between off-farm pluriactivity and on-farm pluriactivity would appear analytically useful. On-farm pluriactivity can be looked upon as a redistribution and changing utilization of on-farm resources, and defined as farm diversification. It can be subsequently divided into agricultural production diversification, structural diversification and agricultural contracting (Figure 2.1). Agricultural production diversification is the production of an unconventional food or industrial commodity and is based around agricultural production practices. Within it, three sub-divisions can be identified: unconventional enterprises involving production of unconventional crop and animal products; unconventional production techniques, for example organic production; and ancillary production involving existing farm resources, for instance woodland. These production diversification options fall within farm diversification, but outside the OGA and farm business diversification classifications, because they are production based and rely on agricultural production and marketing techniques. It should be remembered that they may provide products for marketing enterprises included under structural diversification or off-farm businesses. In contrast, structural diversification does not primarily involve agricultural production and is based around other on-farm activities, typically marketing, service provision and non-agricultural production. Agricultural contracting can be viewed as a separate category as, although based on-farm, it does not involve own-farm agricultural production. It is also likely to relate primarily to the production of conventional products.

It must be remembered, as noted by Evans (1992) and Shucksmith *et al* (1989:345), that '*a preoccupation with forms of diversification or pluriactivity is likely to be less helpful analytically than a focus on underlying farm business and farm household strategies*'.

(ii). GEOGRAPHICAL INCIDENCE OF FARM DIVERSIFICATION.

It is already clear that a wide range of different diversification options are available to farmers and it comes as no surprise that these options represent an area of prominent research interest. Work by Carruthers (1986), Country Land owners Association (CLA) (1986), Slee (1986), Haines and Davies (1988) and Williams (1989) is representative of the comprehensive reviews emerging to investigate possible diversification options. Typically, they are descriptive and have explored practical factors such as site and capital requirements, income, legislation, marketing and management techniques required for farm diversification enterprises. The Ministry of Agriculture Fisheries and Food (MAFF) produced several such guides, including one relating specifically to the development of sporting enterprises on farms (MAFF 1991). These works have not set out to chart the incidence or distribution of farm diversification, so this aspect is reflected in a geographical body of work. Two scales can be identified within these geographical studies, national and regional/local.

Examples of work at the national scale are relatively few, the most notable being that conducted by McInerney and Turner (1991). This study is heavily biased towards overall provision and economic data. They reported 41.2% of responding farms in England, 34.5% in Wales, 7.9% in Northern Ireland and 23.4% in Scotland as having some form of diversification. Significantly, they found that a majority of farm households in England had just one on-farm enterprise (65.6%) and only just over 10% had three or more (of the five enterprise 'groups' they employed). They also found that 60% of the diversified enterprises had been established *before the mid-1980s, taken as the point when income pressures and the diversification solution began to be most prominent.*

Research conducted at the regional/local scale is more abundant and can be grouped according to three geographical classifications, urban fringe, agricultural lowlands and marginal uplands. Ilbery (1991) examined the spatial uptake of farm diversification in the urban fringes of the West Midlands using detailed case studies based on the five categories of diversification he identified previously (accommodation, recreation, adding value, ancillary buildings/resources and unconventional enterprises) (Ilbery 1988). He found adding value the dominant form, reflecting locational influences. Farm-based accommodation was found on 28 farms and biased towards one type, caravan and camping sites (16 farms). Farm-based recreation occurred on 37 farms, but this was dominated by equestrian enterprises (31 farms). Other forms of recreation were poorly represented. Subsequently, Ilbery *et al* (1996), in the West Midlands urban fringe found that 19.6% of farmers surveyed had some

form of on-farm diversification; retailing and accommodation were the two most abundant forms.

Farm diversification in the agricultural lowlands has received the least research attention. Ilbery *et al* (1996) reported a level of 23.9% in Oxfordshire, accommodation and services followed by retail and recreation being the main forms. In contrast, there has been considerable research in upland areas where primary agricultural production is often economically marginal. Davies (1983) in the Less Favoured Areas (LFAs) found 61% of farms had one diversification enterprise, 30% had two and only 9% three or more. In a more recent study in Scotland, Edmond *et al* (1993) reported on levels of structural diversification with on-farm non-tourist enterprises accounting for 8% and on-farm tourist 7% of sampled enterprises on farms. Ilbery *et al* (1996) in the Pennine uplands identified 16.3% of farms which had diversified. The majority of these were in the form of accommodation provision.

(iii). ECONOMIC CONTRIBUTION TO FARM HOUSEHOLDS OF FARM DIVERSIFICATION.

McInerney and Turner (1991), using the farm business survey and a complex methodology, estimated an average of 11.4% of farm income in England and Wales as being derived from diversification. Similarly, Ilbery (1991) found 60% earned less than 10% of their total on-farm income from farm diversification. Davies (1983) reported that over 70% of farmers in the LFAs earned less than 5% of their total income in this way.

In absolute terms, McInerney and Turner (1991) reported a tremendous variation in the financial performance of diversified enterprises. They calculated the average value of output at just over £22,000 per enterprise. Generally these were small scale operations, with nearly two thirds producing less than £5,000 output and one quarter generating less than £1,000. A small number of very large concerns were responsible for the high mean figure. In terms of profitability, they found a reasonably direct link with the scale of operation. The average diversified enterprise earned a net profit (output less actual expenses paid, and equivalent to a trading profit) of about £5,200. However, this was extremely variable, with half of all enterprises making less than £2,500 and almost one in eight showing a loss.

McInerney and Turner (1991), specifically in relation to recreational enterprises, but excluding equine activities which they classified separately, calculated a mean annual output of £4,342. This equated to 45.6% under £1,000, 30.9% generating £1,000-5,000, 16.2% producing £5,000-15,000 and 7.3% £15,000 plus. Significantly, in terms of financial output,

recreation was the lowest of all the groups examined. This is one of the few studies of diversification, other than those more detailed ones concerned solely with tourism/recreation (see Section 2.4), which presents detailed information for individual sub-groups on factors such as output.

(iv). FARM DIVERSIFICATION RESEARCH AND RECREATION.

Reflecting the narrowing focus from pluriactivity to farm diversification, recreation is far more widely identified as a sub-group within research at this level. However, recreation is rarely explicitly defined, rather the inclusion of activities is implicit within the diversification definition, and so the inclusion of certain recreational activities, especially those which fulfil primarily non-economic objectives, is not always clear. This is likely to mean that many of these studies are in fact presenting a sub-set of recreational activities, as outlined in Chapter 1. Few studies progress beyond the identification of tourism/recreation sub-groups to identify categories of recreation, or associate factors with specific types of recreation rather than 'recreation' as a homogenous activity, despite the obvious diversity of activities contained within it.

A major deficiency of the farm diversification literature is that it has generally failed to take into account the inherent links between farm diversification and other pluriactive options. Consequently, remarkably little is known about how combinations of pluriactive adjustments are taking place at the farm household level and little detailed information exists concerning the specific restructuring strategies employed by family farming households within the diversification concept. This is especially true in relation to recreation in combination with other pluriactive adjustments.

2.4. Farm-Based Tourism.

Farm-based tourism has frequently emerged, within the farm diversification literature, as a major diversification option adopted by farm families to aid business restructuring. More importantly, farm-based tourism is the heading under which farm-based recreation is most frequently discussed. This section will, therefore, seek to explore existing farm tourism specific research while focusing specifically on the farm-based recreational component.

The last major studies of farm-based recreation were conducted over twenty years ago. Bull and Wibberley (1976) investigated farm-based recreation in South East England in 1972 and DART (1974) provided a detailed national survey of farm recreation and tourism. Much of the existing farm tourism research has concentrated on the accommodation component at

the expense of the arguably more diverse recreational component. For instance, Evans and Ilbery (1989 and 1992a and b) investigated farm-based tourism, but focused exclusively on the accommodation component. Accommodation enterprises have received considerable research attention and benefited from the marketing and development work of the National Farm Holiday Bureau (established in 1983). The farm-based recreational activities await detailed examination and only a small fraction are represented by a similar body. Initially, this has taken the form of regional FAG and more recently a National Farm Attractions Network (NFAN) has been established (Ilbery 1996).

(i). DEFINITIONS AND CLASSIFICATIONS OF FARM-BASED TOURISM.

It has already been observed in Chapter 1 that up until the late 1980s, there had been a widespread failure to define, and consequently, distinguish between farm-based tourism, farm-based accommodation and farm-based recreational activities. Two interrelated issues, specific to recreation, have been identified. First, the identification of the types of activities which recreation includes and secondly, the coverage of recreational activities on the basis of their financial performance. These two points have already been clarified in relation to the position adopted in this study. However, a more detailed review highlights the different positions adopted by different authors.

In relation to differences between the tourism, accommodation and recreation terms, Harvey (1986) observed that farm-based recreation had been consistently approached under the general guise of farm-based tourism, with little attempt made to distinguish it. The inconsistent use of these three terms was also noted by Evans and Ilbery (1989). This failure to distinguish between accommodation, recreation, and tourism has continued to propagate the definitional confusion in much of the literature (Evans and Ilbery 1993). This is illustrated by DART (1974:6) who identified recreation and tourism as being two distinct, though closely related, activities or uses of land. Recreation was taken to cover '*the leisure activity of the residents within, and of day visitors to, any area whereas tourism involves traveling away from home for one or more nights*'. In this way, DART (1974) restricted the application of the term 'tourism' to accommodation ventures. More widely and in agreement with Evans (1992), tourism has been defined as '*the temporary short-term movement of people to destinations outside the places where they normally live and work, and their activities during their stay at those destinations*' (English Tourist Board 1991:7). Another aspect of this definitional confusion is the existence of associations between accommodation and recreational enterprises which was observed by Evans and Ilbery (1993).

Evans and Ilbery (1989) presented the first comprehensive definition of farm-based tourism updating previous studies which had become increasingly anachronistic as a result of their failure to distinguish between the accommodation and recreation components. They defined farm-based tourism as comprising two main components: farm-based accommodation and farm-based recreation. Farm-based tourism was adopted as a broad term covering both types of ventures, generally describing the phenomenon of attracting people onto agricultural holdings. Subsequently, they suggested the use of tighter definitions whereby farm-based accommodation is concerned with where the visitors to the farm reside and farm-based recreation is concerned with what they do whilst on the farm.

More recently, Ilbery (1996:86) presented a detailed definition of farm-based recreational attractions as *'a permanently established excursion destination which permits public access for entertainment, interest and education, but not accommodation. The attraction may include farm shops, fisheries, equestrian centres and anything else that might attract the public to visit a farm for recreational rather than for accommodation purposes. It must be open to the public without prior booking, for published periods of the year, and should be capable of attracting tourists or day visitors as well as local residents'*. Although in agreement with the wider tourism definition outlined by Evans and Ilbery (1989), this definition relates specifically to 'farm attractions' and consequently, it addresses only one, economically focused, component of the wider farm-based recreation concept. The definition implies exclusivity between accommodation and recreation ventures and does not accommodate enterprises such as activity holidays which combine accommodation and recreation. It also fails to identify the operational status of the farm, allowing the inclusion of countryside attractions.

Numerous attempts have been made to classify tourist and recreational activities (See Clawson and Knetsch 1966, Capstick 1972, Patmore 1983, Shaw and Williams 1994). Distinctions made have included; physical resource orientated, intermediate and user-orientated; formal and informal; land based and water based; active and passive; spectator and participant; and nature, human-nature interface and human. The aims of such classifications have been to permit greater analytical investigation of tourism. However, the tremendous diversity of tourist activities has meant that the results have largely failed to produce distinct categorizations. Consequently, consistent application of these terms to farm-based recreation has not been widespread, with classifications primarily based around generic groupings. These have largely failed to illustrate the interactions between groups and residential and non-residential forms of farm-based recreation.

Carruthers (1986) adapted a classification of farm tourism enterprises based on income and ease of charging. It is centred around three categories; tourist accommodation, resource based activities and day visitor enterprises (See Table 2.6).

Tourist Accommodation	Resource Based Activity	Day Visitor Enterprise
In farmhouse Bed and Breakfast Guest House Farm Holiday Auto-holiday Self Catering Farm Cottages Chalets Converted farm Buildings Second Homes Redundant Farm Buildings Surplus farm Cottages Long Let caravans Camping Sites Specialist General Camping Barns Caravan Sites Transit Touring Static Specialized Holidays Field Studies Sketching Fishing Horse based Diet based	Horse and Pony based Riding and trekking Eventing Polo and racing Hunting Livery and grazing Equestrian centres and clubs Water based Fishing Swimming Boating Mooring Marinas Shooting Rough shooting Organized shooting Water fowl shooting Clay pigeon Rifle Pistol Archery	Informal recreation Car parks and Picnic sites Country parks Rambling and wandering areas Access to areas of natural interest Caves Hills Woodland Downland Bird and Wildlife watching Conserved sites Nature walking Botanical study Dog based Exercise Training Showing Sporting Squash, Tennis Golf course or driving range Village football and cricket Athletics jogging running Catering Teas Kiosks Farm Produce sales Shop on farm or roadside PYO Public Events In tents or in the open Farm related e.g. shows, ploughing matches, gymkhanas, hedge laying, tractor pulling Non agricultural e.g. motor cycle scrambles, autocross, pop concerts, religious meetings, archery, model and full size aircraft, balloons etc. Educational activities Farm open days Farm trails Demonstrations School visits Adopted farms

Table 2.6. A classification of farm-based tourist enterprises. (Carruthers 1986:174-5).

Employing broad categories, this classification attempts to identify distinctions according to the type of provision. This may be useful when considering farm household attitudes towards the development and initiation of recreational activities. Although not exhaustive, the classification provides quite a useful directory of recreational activities; however, it contradicts the natural resource based and user orientated classification put forward by

Clawson and Knetsch (1966). In Table 2.6, activities are classified as resource based where they involve the active provision of resources. This is in contrast to Clawson and Knetsch who identified resource based activities as those involving natural resources. A preliminary analysis by Ilbery (1989) outlined different types of farm-based recreation with the use of a variety of exploratory case studies. Classification was based around the same generic groupings as illustrated in Table 2.6. Subsequently, Ilbery (1996) identified seven categories relating to farm attractions (Table 2.7).

Categories of Farm Recreational Attractions
Animals, especially rare breeds and horses but also pets and other farm animals.
Nature trails, walks and interpretation centres.
Leisure parks.
Arts and crafts.
Retail and catering.
Children's entertainment, including play areas and adventure playgrounds.
Special events, such as caravan rallies, donkey driving, gymkhanas, country fairs and dog shows.

Table 2.7. Categories of farm attractions (Ilbery 1998).

This lack of definitional clarity and consistency means that comparisons between studies are, at best, difficult. Consequently, there is a lack of accurate quantitative data in the UK regarding the existence of farm tourism, and especially recreation. On a more practical note, the widespread inconsistencies in distinguishing tourism, recreation and accommodation mean that it is impossible to identify separate recreation and accommodation literature's. The following sub-sections review the wider farm-tourism literatures, reading it with a specific focus on the recreational component.

(ii). GEOGRAPHICAL INCIDENCE OF FARM TOURISM.

Two main bodies of research into the incidence of farm tourism, each with distinctive characteristics, can be identified. Early research exists into the phenomenon of farm-based tourism, such as that by Bull and Wibberley (1976) and DART (1974), which was undertaken before significant agricultural restructuring and the development of the pluriactivity concept. This has been followed by more recent examples of geographical research on diversification which include research at a regional level by Ilbery (1989 and 1996) and a national level by Evans and Ilbery (1989).

Within these two bodies of research three recurrent themes emerge. First, work has neglected the geographical incidence of farm tourism. Farm tourism has been discussed in

general diversification texts (see 2.3 (ii)) and these studies have tended to be concerned with practical and financial aspects of the initiation and successful operation of farm-based tourist enterprises. For example, early tourism specific work of this type by Burton (1967) investigated caravan sites, camping sites and horse riding, presenting capital requirements, operating costs, revenue and net returns. More recently, Ilbery (1989) in the West Midlands urban fringe, in one of the only specific studies of farm-based recreation, employed a range of case studies to examine provision and economic characteristics rather than incidence.

Studies at a national scale form the second theme. A national survey by DART (1974) estimated between 10-15,000 farms in England and Wales (4-6% of the total) as operating recreation and tourism enterprises open to the public. They identified the bulk of these as being some form of tourist accommodation. This study also included farm open days and other temporary recreational events which have rarely featured in the literature subsequently. Harvey (1986) suggested that the most significant farm-based diversification enterprises are those related to tourism, but failed to identify the factors contributing significance. He estimated the number of farms involved in tourism and recreation to represent less than 10% of the total. This is in agreement with Carruthers (1986) who estimated a figure of 20,000 farm businesses with recreation and tourist enterprises (approximately 10% of the UK total). Gasson (1987) reported 4,500 in tourist activities and 3,000 in sport and recreation in England and Wales. Evans and Ilbery (1989) provided a review of the extent of farm tourist provision in the UK and subsequently Evans (1990) identified 5941 farms with accommodation provision in England and Wales. Incredibly, recent reviews of national countryside recreation by Harrison (1991), Glyptis (1991) and Owens (1984) made no mention of farm-based recreation, concentrating on agency provision without mentioning farmers. This reflects the emphasis of these studies on the wider sphere of countryside access and not to specific private recreational facilities. These are perhaps viewed as insignificant to the tourist industry, but an agricultural geography perspective emphasizes that they are not insignificant to farmers.

The third theme relates to studies at a regional or local level. The geographical extent of this research has been almost exclusively limited to areas of high demand. In Devon and Cornwall, Davies (1973) found accommodation to be the principal tourist enterprise, with only a minor number (about 10% of those providing accommodation) including sporting or recreational activities. Indeed, he found no farmers who contributed to tourism by supplying recreational facilities alone. The results of this survey correspond very closely with those of Davies (1971) where just over 11% of the farmers with accommodation also provided some

form of recreational amenity. More recently, Evans and Ilbery (1993) reinforced the link between accommodation and recreational ventures. Their findings confirmed recreational activities as being the most common type of diversification additional to accommodation, being found on 51% of holdings with accommodation. They reported that the most popular recreational activity found alongside accommodation was fishing, followed by riding and shooting. In relation to Farm Attraction Group members Ilbery (1996) reported that over 50% provided other facilities with accommodation, fishing and horse riding dominant.

Bull and Wibberley's (1976) study of farm-based recreation in South East England showed that in 1972/3 9.6% of farms were engaged in tourist and recreational activities which were not for their own use, including a number of farms that had more than one tourist enterprise, although if those with only accommodation provision are excluded 7.2% provided facilities for recreation. The relative occurrence of different enterprises is detailed in Table 2.8. This also illustrates the fact that Bull and Wibberley made no attempt to define recreation in their study, and so included accommodation enterprises.

Enterprise	Percentage Occurrence ¹
Caravan sites	17.5
Farm house accommodation	6.2
Horse riding	20.8
Camping sites	13.9
Nature reserves	4.2
Fishing	5.5
Motor Cycling	4.2
Shooting	14.5
Other	13.2
Total	100.00

Table 2.8. Percentage occurrence of farm-based tourist enterprises in South East England (Adapted from Bull and Wibberley 1976) ¹It should be noted that this work included all types of recreational facility including non-commercial activities and facilities that were purely for the farmers' own use (family and / or friends). These accounted for 5% of all facilities.

In Scotland, Denman (1978) in a report on 'Recreation and Tourism on Farms, Crofts and Estates' and, likewise, Frater's (1982) study of 'Farm Tourism in England and Overseas' made little specific mention of farm-based recreation, concentrating almost exclusively on the accommodation component. Denman (1978) suggested that up to 20% of farms were involved in tourist and recreational pursuits. Davies (1983) reported a slightly higher level of recreational facilities in the LFAs with 18% of holdings providing some form of recreational or

sporting activity. Again, only one farmer in five specialized solely in such facilities. It should be noted that national estimates extrapolated from unrepresentative regional surveys, such as those in recognised tourist destinations, are unlikely to provide an accurate indication of the extent of farm-based recreation. Evans and Ilbery (1989) observed the same problem in relation to estimates of national accommodation provision.

(iii). ECONOMIC CONTRIBUTION OF FARM TOURISM TO THE FARM HOUSEHOLD.

Much of the early tourism specific work generated data relating to the financial performance of tourist enterprises (DART 1974, Bull and Wibberley 1976). However, this is now outdated. More recent, specific, work by Evans and Ilbery (1992a) investigating farm-based accommodation reported that 65% of farm households with accommodation gained less than 10% of their total income from this enterprise. A similar pattern tends to be confirmed by Ilbery *et al* (1998) (Table 2.9) in relation to profit from farm tourist activities.

Type of Tourist Activity	Profit (1992)			
	Zero	<£5,000	£5,000 -£20,000	>£20,000
Serviced Accommodation	16	16	58	11
Self-Catering Accommodation	15	15	50	20
Caravans/Camping	17	0	75	8
Livery/Pony Trekking	33	22	33	11
Sport/Leisure	0	11	78	11

Table 2.9. Profit for farms with tourist activities (Source: Ilbery *et al* 1998).

In relation to farm attractions, Ilbery (1996) reported 36% as having no agricultural income, a significant reflection on the inclusion of countryside attractions within farm attractions marketing. Perhaps even more notable was that only 11% obtained 80% or more of their total income from farming, with the smaller farms relying most on the attractions to generate income. The Agricultural Development and Advisory Service (ADAS) found that one in three attractions provided essential supplementary income and 23% provided useful but not essential supplementary income (ADAS 1994). A third, particularly working farm attractions, relied heavily on group visits and educational parties for their income. This demonstrates the often very limited economic contribution, even in the case of 'farm attractions', of recreational activities to farm businesses.

(iv). FARM TOURISM RESEARCH AND RECREATION.

Even within the farm tourism literature there are relatively few recreation specific pieces of

research. The majority of studies concentrate exclusively or primarily on the accommodation component. Where recreation is considered definitional confusion is evident in two interrelated ways (as noted in Chapter 1). First, in terms of the types of activities included, for example temporary events and recreation for personal use have rarely featured in the literature. Secondly, recent tourism specific studies have tended to focus on those recreational activities, such as farm attractions, which are typically financially motivated, although the inclusion of recreational activities which generate very low or no income generating activities is more evident in some of the early tourism studies.

The lack of contemporary tourism studies covering recreation, coupled with definitional confusion means that there has been very little research which has identified the incidence and distribution of recreational activities, the number of farms offering multiple recreational activities, the incidence of recreation in tandem with other farm tourist enterprises and other pluriactive options and importantly why certain farm businesses have initiated various types of farm-based recreational activities.

2.5. Critique of Factors Influencing the Development of Pluriactivity (with Specific Reference to Farm Tourism Research).

This review has so far examined definitions, classifications, incidence and financial aspects of farm tourism in detail. From the literature, a range of factors can be identified as influencing the development of all pluriactive farm household strategies. It now seems appropriate to utilise the pluriactivity concept to examine these factors. In this way, some of the interactions between the factors influencing pluriactivity, whether resulting in non-adoptive, exclusive or combination strategies, can be explored with specific reference to farm-based tourism. Additionally, in many cases, the specific literature on farm-based recreation is limited so that a wider review is likely to enable the identification of useful insights which can then be related to farm-based recreation. This section is divided into five sub-sections, based on the groups of factors influencing diversification, identified by Ilbery (1988).

(i). RESOURCE FACTORS.

The particular configuration of land, labour and capital resources of farms has been shown to be associated with the development of different types of pluriactivity, for example woodland, ponds, rivers, buildings, machinery and labour, present exploitable opportunities, that may encourage farm-centred diversification. Equally, lack of exploitable resources on farm is likely to constrain the development of farm-centred diversification and promote off-

farm pluriactivity. Interestingly, farmers with farm-based accommodation and farm-based recreation tended to rank the availability of resources above an urban fringe location as a major factor affecting the decision to diversify (Ilbery 1991). Frater (1982) reported that 16% of farmers became involved in tourist enterprises to utilise more fully their buildings and labour resources.

Farm type has been shown to be an important factor influencing the development of pluriactivity. Evans and Ilbery (1993) observed that the arable nature of agricultural production in Lincolnshire enables farm operators to devote a proportion of their labour time to off-farm activities in addition to any farm-centred enterprises. Bateman and Ray (1994) found that livestock (hill sheep only) farms had the highest relative commitment to OGAs. Ilbery (1987) reported that OGAs appeared to relate most to farms with lower labour requirements (cereals, permanent crops, grazing of livestock) and less to intensive dairy, pig, poultry and horticultural enterprises. In agreement, Dalton and Wilson (1989) found that, as with off-farm jobs, alternative enterprises were less common on dairy farms. Similarly, McInerney and Turner (1991) found a greater number of diversified enterprises on cropping farms (1.52 enterprises per holding) than LFA livestock farms (1.21). Bateman and Ray (1994) suggested that lower levels of pluriactivity on dairy farms might reflect the capital-intensive nature and time consuming work practices of dairying. Alternatively, recent relative profitability may have meant an absence of financial pressure to be pluriactive (Ilbery 1991).

In relation to farm-based tourism, Davies (1983) came to similar conclusions to Bull and Wibberley (1976) and Ilbery (1987). They found tourist enterprises mainly on mixed agricultural holdings where livestock, especially beef and sheep, predominate. It should be noted that the location of Davies' (1983) study in the LFAs may have exaggerated his conclusions. ADAS (1994) reported four main types of farm on which attractions are located; mixed arable and livestock, mixed livestock, dairy and sheep. Together, these types accounted for 58% of the total attractions. Significantly, 80% of the farming enterprises involved livestock suggesting that the nature and appearance of a typical livestock holding offers greater scope for a farm-based attraction than purely crop based enterprises. However, overall there has been little investigation of possible relationships between specific types of recreational activities and farm types.

In a Welsh study, Bateman and Ray (1994) reported that small farms (<50 hectares (ha)) devoted as much as 45% of household FTE labour to OGAs. Medium farms (50-200 ha)

were found most likely to be engaged in non-agricultural work on the farm and large farms (200 ha plus) least likely to be engaged in work off-farm. This is in agreement with the findings of Dalton and Wilson (1989) in Scotland who found that the total proportion of respondents with off-farm jobs decreases as farm size increases. In England and Wales, Gasson (1986) found that farmers with an OGA tend to favour very small and large farm sizes. Off-farm pluriactivity was most abundant on the small farms, whereas on-farm OGAs appear to be better represented on larger farms. This gives rise to the U-shaped distribution of OGAs commented upon by Gasson (1986). In agreement a substantial reallocation away from farming activities towards off-farm work on the smallest farms, and towards farm-based non-agricultural activities (often tourist accommodation) on the larger farms, was reported by Shucksmith (1993).

Ilbery *et al* (1996), investigating business diversification, identified clear trends in relation to farm size. They found distinctions between on-farm and off-farm enterprises. A tendency was reported for off-farm business diversification to be concentrated amongst both very small (<40 ha) and very large farms (>400 ha). On-farm activities were most common on medium sized farms (120-200 ha), with leisure and recreational enterprises favouring the larger farms in particular. Bull and Wibberley (1976) observed a general association between larger farms and tourist enterprises. A failure to distinguish between accommodation and recreational enterprises is also evident in much of the other literature and limits the direct applicability of these findings to the recreational component. In relation to farm attractions, the ADAS (1994) survey reported an average size of 97.5 ha; this was influenced by a small number of large sites and the median was 25 ha with 24% under 10 ha and 46% under 50 ha.

McInerney and Turner (1991) found that recreational enterprises on average occupied 6.9 hectares of land. Unfortunately, in relation to farm-based recreation the literature largely fails to distinguish between accommodation and recreational enterprises. As a result it exhibits broad generalisations suggesting that recreational enterprises favour large farms, except perhaps in situations of very high demand. There has been little attempt in the literature to identify any differences in farm size which may be connected to different types of recreational ventures, for instance golf courses and larger farms. Equally, the literature fails to recognise that the number and distribution of enterprises according to farm size does not necessarily reflect the total provision in terms of capacity. Clearly, these results illustrate the development of different types of pluriactivity with farm size. Small farm size is likely to limit the availability of resources for on-farm diversification and the development of economies of

scale, consequently promoting off-farm pluriactivity.

With falling farm incomes, many farmers do not have the necessary capital resources to invest in alternative enterprises. A lack of capital has been cited frequently as a major constraint on the development of tourist enterprises (Jacobs 1973, DART 1974, Denman 1978). Similarly, Bateman and Ray (1994) identified indebtedness as a pressure pushing household members to seek sources of supplementary income. However, the literature suggests that capital resource requirements for recreational activities are quite low.

Ilbery (1996) reported that a majority of farm attractions had invested less than £5,000 in setting up their recreational activities and less than 30% had spent over £15,000. To provide some perspective, even this scale of investment is small in comparison to the capital required for new agricultural machinery and buildings. The main source of capital had been bank loans, although about 40% had received grant aid from Local Authorities, Tourist Boards, the Rural Development Commission and MAFF.

(ii). PERSONAL FACTORS.

A wide range of personal factors has been shown to influence the development of pluriactivity. Gasson (1973) recognised that farm household individuals hold a variety of goals and values besides economic gain. According to DART (1974), farmers have four main motives behind the initiation of farm-based accommodation: financial, social, interest and altruistic. Bull and Wibberley (1976) reported similar motives towards farm-based recreation. The decision to diversify on the farm was often not economically motivated. They found interest and philanthropic reasons to account for 28.2% and 19.7% respectively of farmers' reasons for establishing recreational ventures. Similarly, Ilbery (1991) identified social and interest motives as particularly important in relation to farm-based recreation. Frater (1982) reported socializing in an unsociable occupation to be an important consideration, expressed by 25% of farmers in relation to farm tourism. The ADAS (1994) survey reported 46% of farm attractions had been established for personal interest or enjoyment. Personal factors may also inhibit the development of pluriactivity. Many farmers showed a lack of interest, or were unhappy at the prospect of opening farms to visitors. Instead, a preference was shown for traditional methods of farming, with many believing that their peace and solitude would be disturbed (Frater 1982).

Different types of qualification and education levels have been related to types of pluriactivity. Contracting work on other farms was found by Bateman and Ray (1994), to be

more likely to be associated with those who had attended agricultural college. Those with other qualifications were more likely to be engaged in non-agricultural work on the farm or in off-farm employment. Dalton and Wilson (1989) found that off-farm jobs occurred predominantly in the form of agricultural, service and professional employment. The most common jobs included agricultural contracting, teaching, nursing, clerical work, agricultural labouring, and business management/directorships. Structural farm diversification enterprises would appear to be associated with non-agricultural qualifications and household skills. However, research has yet to identify the particular educational backgrounds and skills which are likely to promote particular farm-based recreational activities or even whether there is any type of relationship.

The position in the household life cycle has been shown to have important consequences for the farm business and pluriactivity (Potter and Lobley 1996). Farm family structures are dynamic and the human resources available on a family farm will not be constant over time. According to Bateman and Ray (1994), the likelihood of a household being active in off-farm employment increases at each stage of the life cycle. Shucksmith (1993) found that the largest reallocation of labour from agriculture and into off-farm work had been amongst households with farmer, spouse and other family members present. He identified such households as the only ones to reallocate labour in favour of off-farm work. Farm households devoted a much greater proportion of their labour to off-farm activities where the farmer was in his 40s and when the household could be expected to include teenage or young adult offspring. A much lower proportion was allocated where the farmer was in his 30s (when children are young) or 60s (when children have left the household).

In relation to on-farm diversification, Frater (1982) found that farmers with young children were less likely to participate, as were farmers with elderly parents. Although Evans (1990) found that children moved quickly from being a constraint to being a help with accommodation and in the LFAs, Davies (1983) found farm tourism mainly on family farms with older children. Ilbery *et al* (1996) reported that adopters of business diversification tended to be couples with children of all ages. Non-adopters were over-represented in the 'single' and 'couple with no-children' categories. In contrast, on-farm agricultural diversification was not related to household type and size, nor to a farmer's age. Ilbery (1991) reported that farmers embarking on alternative enterprises were typically not young, new entrants, but people with considerable farming experience. Indeed, over 70% were older than 45 years of age. Similarly, the Arkleton Trust (1992) survey in the EC found 37.1% of farms with high levels of farm-based diversification to have principal farmers aged

50-59 and Halliday's (1989) study of Devon suggests that in the later stages of the family life cycle, new possibilities for engaging in alternative sources of income may exist.

On-farm pluriactivity, and therefore farm tourism, appears to favour farms in mid-life cycle with older children. This raises the question of the continuation of different pluriactive processes at different points in the household life cycle. Research into farm tourism has generally not elucidated how particular farm-based recreational activities are likely to be initiated, operated and evolved, as a result of changes in the farm household life cycle and succession. Similarly, research has failed to identify any differences between particular types of farm-based recreation and position in the life cycle.

It has been observed that the development of pluriactivity over time has the potential to alter the distribution of power between farm husbands and wives in the farm business and household, fundamentally changing traditional patriarchal gender relations within the farm. For example, three outcomes relating to farm wives and pluriactivity were put forward by Evans and Ilbery (1996):

- I. pluriactivity may create a degree of economic freedom for the wife. There may be an associated change in her position in the business and household decision-making process as the distribution of new earnings has to be negotiated;
- II. pluriactivity may result in a greater involvement in agricultural work by the wife. This may change her position in the business and household decision-making process;
- III. pluriactivity may increase the amount of work that farm wives have to undertake, with no accompanying gain in independent income.

However, Gasson and Winter's (1992) study of East and Mid Devon highlighted that farm household pluriactivity did not usually result in females exercising greater power in household decisions. Similarly, in relation to farm-based accommodation, Evans and Ilbery (1996) reported that the most frequent destination of income from accommodation was spending on other family members or household comfort, with little attendant increase in economic independence and decision-making power within the household. They also reported that 19% of women controlling farm-based accommodation had their income consumed by the agricultural activities of the business, again promoting situations with little increase in independence. Nonetheless, a small increase in power was observed because of the role the income played in the continued survival of the business.

It must be observed that farm-based accommodation is particularly gender orientated. The phenomenon of farm-based recreation is more diverse and, although individual types of recreation may be strongly gender orientated, a more even gender differentiation, or even a male bias, might be expected. Although gender relations have been widely researched in relation to elements of pluriactivity, for instance see Gasson (1992) and Evans and Ilbery (1996), a major deficiency of the literature is that there has been little work specifically in relation to farm-based recreation.

(iii). LOCATIONAL FACTORS.

The role of location is very important in determining the presence of on- and off-farm pluriactivity. Accessibility to market opportunities is an influential factor, for example McInerney and Turner (1991) found that households with off-farm employment were more common where local labour markets were well-structured and diversified. The constraints of remote rural locations are likely to suppress opportunities for off-farm pluriactivity and farm-centred pluriactivity. Equally, urban fringe locations are likely to promote pluriactivity, but may also have negative influences, for example vandalism, theft and fear of damage. Ilbery (1991) found an urban fringe location ranked alongside the availability of resources as the second most important factor affecting the decision to diversify. Ilbery (1988) highlighted the benefits of an urban fringe location in providing market opportunities for non-farming enterprises on farms, and employment opportunities.

Haines and Davies (1988) noted the importance of location in an established tourist area for successful provision of tourist accommodation. Edmond *et al* (1993) found that alternative farm-based enterprises were concentrated in the tourist areas. They developed gravity models to define degrees of access to markets from farm locations. Proximity to markets was shown to be an important factor for both tourist and non-tourist on-farm diversification, and was reflected in the location of the farms with on-farm non-agricultural activities. Farms in areas without high levels of access to local or tourist markets face considerable difficulty in diversifying through on-farm diversification (Edmond *et al* 1993). A complementary effect was observed by Edmond *et al* (1993) where close proximity to visitor attractions was regarded as important to the successful provision of tourist accommodation.

Similarly, Evans and Ilbery (1993) found farm accommodation and direct marketing ventures located on major roads, due to the level of passing trade. Regional locational factors were illustrated in Dorset where businesses had developed the most farm shops in response to

the high number of passing tourists during the summer months. Evans and Ilbery (1992b) reported considerable regional variation in the occurrence of accommodation on agricultural holdings. They found that in traditional tourist destinations, such as the South-West, farmers supplying accommodation were very well represented. Scenic areas such as National Parks were also associated with more specialized accommodation provision. In these areas, where farming was often marginal, farmers were thought more likely to search actively for ways of raising additional income. In the main lowland arable regions of the country, farm accommodation was poorly represented, except in recognised short break destinations and areas within reach of large population densities, as in the Cotswolds. The lack of accommodation facilities was attributed to few major tourist attractions and the relatively prosperous nature of arable farming at that time.

A spatial mismatch has been observed between the supply of, and demand for, recreational facilities. The main rural recreation destinations are typically found in the least populated and peripheral (tourist) areas, whereas most demand comes from the more heavily populated and prosperous agricultural lowlands (Bull and Wibberley 1976). Consequently, it is not surprising that most studies have examined farm-based tourism in upland areas (Capstick 1972, Denman 1978, Davies 1983). This is illustrated by Ilbery (1996) who identified an association between farm attractions and traditional tourist destinations in southern England and Wales. A rare study undertaken in lowland areas was that by Bull and Wibberley (1976) in Surrey, Kent and Sussex, although Frater (1982) and Ilbery (1987, 1989) have examined developments in Herefordshire and the West Midlands urban fringe, respectively. Ilbery (1996) observed that the urban fringe farm attractions were generally doing well, with rising attendances, whereas those located in prime tourist areas were having to compete with other non-farm visitor attractions.

Most studies have tended to concentrate on the influence of supply. Work on the influence of demand on the development of recreational activities is poorly developed and has been widely neglected in much of the specific pluriactivity, diversification and farm tourism literature because these studies focus on the farm household. A rare study is that by Frater (1982) who approached farm accommodation from a demand perspective.

Different modes of pluriactivity can, therefore, be expected to occur in different locations and it has been observed that these differences are likely to be greatest between urban fringe regions, marginal fringes and prosperous agricultural lowlands. The final pattern is likely to be complicated by farm and farmer characteristics. Several authors, including Ilbery (1991),

have speculated about the geographical outcomes of these different processes. It seems likely, therefore, that farmers in traditional tourist destinations, in urban fringe locations and in the more heavily populated agricultural lowlands stand to benefit most from diversifying into farm-based recreation.

The occurrence of competition, from within the agricultural sector or outside it, has been observed to be an important factor influencing the development of farm-based diversification enterprises (Evans and Ilbery 1989, Edmond *et al* 1993). The quality treadmill effect, observed by Evans and Ilbery (1989), in relation to accommodation provision, may also be an important factor particularly in areas of high competition. Farms with accommodation ventures in these well-established tourist destinations were seeking to exploit niche markets such as integrated accommodation-recreation holidays to counter the effects of growing competition. Specialized small niche markets, such as some farm-based recreational activities, can easily become saturated.

There has been relatively little geographical work which details the outcomes of these processes, specifically in relation to farm-based recreation. In contrast to farm-based accommodation, where tourists have time to permit them to travel to traditional rural tourist destinations, farm-based recreation does not necessarily involve a stay away from home. Consequently, it is possible to speculate that, although farm-based recreational enterprises are likely to be associated with traditional tourist areas, they are also likely to be found within travelling distance of areas of high population density.

(iv). ECONOMIC FACTORS.

Diversification of farm household income through pluriactivity has been encouraged in UK agricultural policy through the provision of grant aid for capital investment, marketing and feasibility under the former Farm Diversification Grant Scheme (FDGS). The FDGS was introduced by MAFF in 1988 and offered farmers 25% capital grant aid on diversification projects, including recreation. Grants were also available for feasibility studies and market research (up to 50% of costs) and up to 40% was available for initial marketing (Ilbery and Stiell 1991). Financial support for diversification, for example farm tourism grants, has also been available in areas designated as Objective 5b under the European Union (EU) structural fund programme (1994-1999).

In response to the Agenda 2000 CAP reforms which redirect support away from agricultural production towards wider rural development goals MAFF and the National Assembly of

Wales Agriculture Department (NAWAD) have drawn up rural development plans for the period 2000-2006 (MAFF 2000, NAWAD 2000) which bring together, under a single framework, support for a suite of existing and new rural development measures. In England these include expansion of existing agri-environment, forestry and organic schemes and the introduction/re-introduction of four new schemes covering financial support for: processing and marketing; training; rural enterprise (including diversification) and energy crops. These schemes are available across the whole of England, with the exception of the EU structural funds (2000-2006) Objective 1 areas, where similar measures are available under slightly different administrative arrangements. Similar rural development measures are also being implemented in Wales. This renewed policy emphasis on support for diversification is likely to promote the further development of recreational activities on farms in the future.

Off-farm and farm-centred pluriactivity are both heavily influenced by financial returns, both within and outside farming. In the West Midlands urban fringe, Ilbery (1991) found that the overwhelming reason for diversifying was the need to generate extra income. Of the farmers interviewed, 80% placed it as the single most important factor. Bull and Wibberley (1976) reported a lower level of 47.9% of farmers had developed recreation (including camping and caravan sites) for reasons of profit.

With regard to pluriactivity through off-farm employment, the relationship between its incidence and the opportunities and constraints of the off-farm environment appears more complex. There is evidence that the extent of off-farm work increases if the financial returns from farming decline (Edmond *et al* 1993). Bateman and Ray (1994) identified indebtedness as a pressure pushing household members to seek sources of supplementary income. In their survey, 54% of households had one or more type of debt and were more likely to be pluriactive than those without debt.

(v). OTHER FACTORS.

Most tenancy agreements do not cover activities outside mainstream food supply, particularly structural on-farm diversification. Farmers may be precluded from developing such enterprises or may find themselves faced with higher rental charges because they have failed to keep within the terms of their tenancy. This tends to be confirmed in the research with tenanted farms more strongly associated with off-farm pluriactivity, and owner-occupiers with on-farm pluriactivity. This is supported by Ilbery (1991) who found that 66% of diversified farms were owner-occupied. In relation to recreational activities, Bull and Wibberley (1976) failed to find any link between tenure and the development of recreational

activities. However, according to ADAS (1994) a majority (over 60%) of FAG members were owner-occupied holdings. Again, a failure to distinguish adequately between accommodation and recreation has limited the application of many studies directly to farm-based recreation, or individual types of recreation.

The National Farm Attractions Survey (ADAS 1994) reported difficulty over planning permission and other legislative requirements to be a major problem experienced by 33% of operators. Very little research has investigated planning specifically in relation to the broader recreational phenomenon, and variations according to individual types of recreation have never been investigated.

Geographical variations in the membership of marketing groups were observed by ADAS (1994) in relation to farm attractions. In Cumbria, 83% of attractions were found to be in marketing groups; in contrast, a level of only 11% was reported for Northumbria. Membership was typically high in traditional tourist areas and areas of high population. A relatively high proportion of farm attractions (over 40%) did not belong to any marketing or specific farm attraction group. Indeed, 48% of attractions with a turnover of over £50,000 were found not to be in any marketing group. A significant trend was observed between increasing receipts and increasing membership of marketing groups. The NFU (1986) observed that there was a large number of private and public agencies offering advice but there has been little inter-agency co-operation/co-ordination. Previously, the availability of specialist advisors on farm-based tourism has been poor (Slee 1987).

2.6. Summary.

This chapter has provided a comprehensive review of the appropriate literature relating to pluriactivity and farm-based tourism. Five main points emerge:

1. Pluriactivity is an extremely complex phenomenon of which farm-based recreation specifically, is only one component. There is much literature relating to the identification and definition of different types of pluriactivity, its financial contribution to the farm business and factors influencing its development. Within the literature three different layers of research, which all relate to farm-based recreation, can be identified:
 - a). 'broad brush' research considering pluriactivity as a whole. This has often failed to identify and/or relate to individual components, but nonetheless still includes farm-based recreation;
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- b). general analyses of individual categories of pluriactivity predominate. For example, there is an extensive literature on farm diversification;
 - c). more specific literature which focuses on farm-based tourism, and covers accommodation and/or recreation.
2. Specific literature on farm-based recreation is poorly developed and two key issues of confusion are evident:
- a). prior to the work of Evans and Ilbery (1992a) there had been a general failure to distinguish between farm-based tourism, accommodation and recreation. The use of these terms in an almost interchangeable way means that separating the accommodation and recreational components is extremely difficult and comparisons between existing studies almost impossible. This confusion continues in some literature despite this work;
 - b). furthermore, little effort has been expended in defining farm-based recreation and the activities and types of provision which it encompasses. This is especially true in the more recent pluriactivity literature which has tended to focus implicitly on a sub-group of financially motivated forms at the expense of the whole recreation phenomenon. The development of the term 'farm attractions' has added further confusion, essentially by creating a sub-group of activities which are not necessarily based on a working farm and include recreational, marketing and retailing enterprises.
3. Estimates of farm-based recreation have varied widely. Much of the existing tourism research has centred on the less diverse and more accessible accommodation component. It has also tended to concentrate on areas where there is a high demand for tourist accommodation. Consequently, there are very few recreation specific studies and those on farm tourism which do include a recreational component are becoming increasingly dated. As a result, the incidence and national geography of the recreational component of farm tourism has rarely been explored.
4. Many factors may influence the non-development or development of farm-based recreation. The lack of a functional definition and classification of farm-based recreational activities means that the literature has seldom differentiated variations in these factors according to:
- a). the development and non-development of the recreation phenomenon as a whole;
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b). the development of different individual types of recreation.

5. There is a wide potential for farm-based recreation, for three main reasons. First, it is associated with demand from both holiday and resident populations. Secondly, the diversity of different types of recreational activities means that it may be a more flexible option than other types of on-farm diversification which require very specific resources. Thirdly, the range of categories of provision means that the provision of the same 'type' of recreation may take place in a variety of ways. For these reasons recreation is potentially a very important pluriactive option available to farmers. In addition the renewed policy emphasis on diversification in the UK as a result of the Agenda 2000 reform of the CAP is likely to promote further development of recreational ventures.
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3. A CONCEPTUAL FRAMEWORK FOR INVESTIGATING FARM-BASED RECREATION.

Chapter 2 demonstrated that there has been relatively little academic research specifically in relation to the provision of farm-based recreation. This chapter is concerned with developing a conceptual framework to analyse the role of farm businesses in providing recreational activities and consists of two main sections. First, theoretical developments in geography, and especially agricultural geography, are examined to identify suitable philosophical directions for the framework. This discussion is guided by the findings from the previous chapter. The second section then seeks to produce a theoretically informed conceptual framework for the examination of the factors influencing the development of farm-based recreation. This will be utilised subsequently to guide empirical investigation into the farm-based recreation phenomenon.

3.1. Suitable Theoretical Perspectives.

Chapter 2 demonstrated that research on the provision of recreational activities on farms has been limited, five fundamental points emerge about farm-based recreation. These serve to provide an important guide for the development of a suitable theoretical approach:

- I. research into farm-based recreation has largely fallen under the 'umbrellas' of tourism and, more recently, pluriactivity. As a result the level of engagement has not been detailed, instead recreation has generally been treated as a homogenous phenomenon - 'recreation' - or bracketed together with accommodation as 'tourism'. The diversity of activities within the 'recreation' label has rarely been explored and factors associated with individual types of recreation rarely differentiated;
 - II. the emphasis of the pluriactivity concept on income generating activities means that many recreational activities fall outside the competence of the concept and have been neglected in the research (economic dynamic). In relation to recreational activities there has been considerable confusion relating to the precise point at which activities become pluriactive (for example, unprofitable businesses, tangential benefits) and non-financially motivated activities (for example many socially or altruistically motivated recreational activities);
 - III. the variety of different types of recreational activities included within 'recreation' (the type dynamic) vary considerably between studies. For example, the majority of studies have not included short-term recreational events;
 - IV. together, the variations in the interpretation of the economic and type dynamics have resulted in wide ranging estimates of the incidence of recreational activities;
 - V. geographically, research has tended to concentrate primarily on the accommodation component of tourism and consequently, on 'tourist' areas. Recreational activities have
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been shown to be associated with both 'tourist' areas and non-tourist areas such as urban fringes and agricultural lowlands. However, the geographical dimension of recreation has rarely been comprehensively differentiated.

The majority of the existing research into farm-based recreation has been conducted using modernist theoretical frameworks and so it is appropriate to examine these initially, and to evaluate their suitability for research into farm-based recreation.

(i). MODERNIST APPROACHES.

'The last fifteen years have been a period of intense theorising over the organisation of rural production' (Moran *et al* 1993:22). In the early 1980s there was a widespread call for agricultural geographers to adopt structuralist perspectives of political economy as a result of increasing dissatisfaction with the explanatory power of existing modernist approaches (such as positivism and humanism) (Marsden 1988). This philosophy allows a conceptualisation of the behaviour of individuals as constrained by the political economy in which such action occurs. Such approaches recognise that farm households are constrained by the wider political and macro-economic conditions of the capitalist mode of production in which they operate. The concentration and accumulation of capital are key processes. However, the application of political economy approaches to agriculture has not escaped criticism:

- I. structuralist approaches of this nature tend to relegate farmers to the role of non-decision-makers, and constraints are emphasized at the expense of choices (Duncan and Ley 1982). Indeed, Whatmore *et al* (1987b:120-121) confirm that *'in order to understand agricultural restructuring there is a need to examine the individual farm family members as active participants and not simply as passive subjects of inevitable structural processes'*. Political economy perspectives obscure expectations which have been shown to be crucial in understanding decisions made by economic agents (Marsden *et al* 1996);
- II. political economy approaches are not well suited to studying a family household dominated sector of production (Marsden *et al* 1996). Despite their modification to incorporate a behavioural element, reflecting the role of individuals in resource allocation decisions, these approaches are still limited when examining non-economic resource allocation decisions of farm households. This is especially true in relation to recreation, which may be primarily socially motivated or where recreational opportunities for household members are intrinsically linked to household dynamics and, consequently economic resource allocations;

III. a third criticism relates to the difficulties experienced reconciling high-order theorising with empirical information (Moran *et al* 1993). The macro-economy has been over-emphasized producing a mainly theoretical structuralist approach. Evans and Ilbery (1992a) viewed closer integration of theory and empirical practice as vital to the continued development of the sub-field of agricultural geography. Middle order theorising has also been advocated in agriculture by Moran *et al* (1993) to permit greater integration between theory and practice and by Bowler *et al* (1996) in relation to on-farm diversification.

As a result of these criticisms, the political economy approach in agriculture was modified from the outset to incorporate a behavioural element and research has aimed to recognise the influence of human agency. Theory in agricultural geography since the early 1980s has been dominated by these modified political economy approaches. For instance, Marsden *et al* (1986b, 1987, 1989) used a modified political economy approach to develop a theoretical framework to examine the external constraints that capitalism imposes on farm businesses. Evans and Ilbery (1989), in a study of farm-based accommodation, attempted to apply such a modified approach incorporating human agency to farm diversification. This approach has been subsequently widely utilised in studies of pluriactivity (for example Marsden 1990, Evans and Ilbery 1993). There has been a clear move towards incorporating a fuller understanding of internal family dynamics into analysis, and to examine how these interact with market mechanisms (Marsden *et al* 1996). However, despite these modifications, studies of pluriactivity employing modified political economy frameworks remain limited in their engagement with farm-based recreation.

In summary, modernist philosophy, encompassing the positivist/behaviouralist approaches that were widely used in agricultural geography prior to the 1980s, and political economy approaches that emerged in the mid 1980s, have been the subject of increasing criticism. Epistemologically, modernist thought centres around the search for universal laws of explanation which show that particular events are the outcome of general processes independent of time, place and the researcher. This is acknowledged to have obscured the distinctiveness of individual localities (the uneven development process) and resulted in the reduction of geographic relations to a passive, secondary status (Dear 1988). Warf (1993:162) observed that '*modernist metanarratives are doomed to be shattered on the shoals of locally unique social formations*', while Cloke *et al* (1991:194) concluded that '*modernist metanarratives fall apart when confronted with -and are worryingly insensitive to- the differences between different peoples and different places*'.

Such criticisms are becoming increasingly evident throughout the discipline and have led to a developing interest in postmodernism as a possible philosophical direction capable of addressing these criticisms. As Cloke *et al* (1991:194) observed '*a properly conceived postmodernist approach to academic inquiry remains ever alert to the subtleties of local knowledge of particular peoples in particular places*'. This has popularly become known as the 'cultural turn' (see Cloke (1997) for the rural geography context). Dear (1988) argued that a failure to appreciate and address the issues of the postmodern critique will result in geography becoming moribund and irrelevant. Numerous other authors (for example Murdoch and Pratt 1993) have argued for postmodernism to be taken more seriously. Consequently, it seems appropriate to review and evaluate the strengths and weaknesses of postmodernism as a suitable approach to the study of farm-based recreation.

(ii). POSTMODERNIST PERSPECTIVES.

Postmodern theory is characterised by a suspicion of overarching grand theories which involve any attempt to construct a system of thought which claims to be complete and comprehensive (Gregory 1989). Postmodernists question the assumption that reality is ordered coherently around a clearly defined centre, the rationally structured universe of modernism. This may be a mode of production (as in Marxist thought) or the subjectivity of human beings (as in humanist thought). Rather, postmodernism emphasizes complexity, randomness and disorder. The postmodern view of reality is one of infinite complexity which cannot be captured by a single theory.

Three major features characterize a perspective of postmodernism; complexity, contextuality and subjectivity (see Sarup 1989 and Lyon 1994). Complexity and its sensitivity to diversity, heterogeneity and uniqueness is the most distinguishing feature of postmodernism. Complexity is recommended as an explicit recognition that general metanarratives have failed to capture the many differences that distinguish one phenomenon, event, or process from another. As Gregory (1989) noted, the commonsense response to the complexity of the world is to impose a coherence and a simplicity which shows particular events to be outcomes of wider processes. Postmodernism accepts that complex systems can only be known through a pluralism of different theories, all of which are alternative simplifications of reality and cannot be reconciled into a coherent whole. This is in contrast with modernist thought which advocates that separate ways of understanding are merging into a coherent whole.

Contextuality represents a second premise of postmodern thought. This involves the re-assertion of time and space into the core of contemporary social theory, in agreement with one of Dear's (1995) precepts. It marks the end of the dominance of time over space. The consequence is that postmodern theory must acknowledge that events are both historically (temporally) and geographically (spatially) specific. Clearly, *when* and *where* things happen is central to how they happen and, therefore, explanations must be tailored to the unique characteristics of places. Phenomena are contingent upon a combination of factors which are unique to individual times and places. It is impossible to understand the individual components of any system without reference to the system as a whole. The occurrence of similar phenomena at different times and places is due to their unique locations. Universalist modernist thought asserts the opposite perspective. In this case, diverse complex phenomena are the result of a small number of universal principles which are unchanging over time and space and so it is possible to atomise the individual components of systems and characterise how they behave. Being close to an individual system does not confer any special advantage.

Subjectivity can be identified as a third premise of postmodernism. Modernist thought advocates objectivism where it is possible to separate the researcher from the researched, whereas subjectivity acknowledges that the researcher is part of the system being researched. Therefore, it is not possible to understand the system without reference to the researchers' activities and values and their linkages between knowledge and power. Subjectivity has been identified by Murdoch and Pratt (1993) as a crucial issue.

A sensitivity towards complexity, contextuality and subjectivity can be observed in '*the new cultural geography with its emphasis on the qualitative, the ethnographic and the self reflexive*' (Graham 1995:175). These qualitative methodologies, ethnographies and participant observations are now being more widely used in an effort to uncover the subtle dynamics of interactions between people and places (Ley 1994). Within the field of rural geography, several authors have begun to address these criticisms. For example, Philo (1992) presented a review of 'neglected rural geographies', which highlighted some failures of modernist approaches and called for rural studies to take the study of 'others' more seriously, widely referred to as the 'cultural turn'. The dialogue between Philo, and Murdoch and Pratt (1994) is another notable example of the emergence of an increasingly vigorous theoretical debate within rural geography. Articles in associated sub-disciplines such as forestry (McQuillan 1993) and agricultural economics (Midmore 1996) have also reflected an increasing engagement with these postmodern debates. However, despite developments in rural geography and in related sub-disciplines, agricultural geography remains largely

isolated from these theoretical discussions (but see Morris and Evans 1999).

Much of this contemporary research shows little deviation from an essentially modernist theoretical orientation, reflecting the major role which modernist approaches have played in the identity of the sub-discipline in post-war geography. It is a rise in the qualitative component and an increasing emphasis on 'middle order' research methodologies in this research (for example, see Moran *et al* 1993) that perhaps begins to reflect the influence of postmodern geographical debates. Specifically it is possible to identify three advantages associated with a postmodern approach:

- I. a sensitivity and attention to difference and detail. Instead of emphasizing similarities, postmodernism urges a greater sensitivity to the differences that exist between phenomena and attention to detail in the empirical record (Clope *et al* 1991). Postmodernism represents and permits a sensitivity to the incredible diversity of farm-based recreational activities which has been conspicuous by its absence in earlier work which has tended to treat recreation as a homogenous phenomenon. Postmodern approaches are also very sensitive to the new value of existing resources in a post-productivist agriculture with an emphasis away from mainstream food production, for example farms as an educational, cultural and heritage resource in response to changing social demands;
 - II. the profitable combination of theoretical and methodological approaches which recognises that different aspects of the complexity of the world are best explained using different approaches and by generating multiple insights. This type of middle order theorising which builds on existing conceptual research and establishes themes that are more readily investigated empirically has been identified as a key advantage of postmodernism; *'we need to contemplate the human world less in terms of 'grand theories' and more in terms of humble, eclectic and empirically grounded materials'* (Clope *et al* 1991:171, emphasis present). Philo (1993) holds the view that a number of different theoretical approaches might be used pragmatically, based on theoretical, empirical and ethical grounds and that such methodological eclecticism could be profitable. Similarly, Ley (1993:172) observes *'the loss of epistemological dogmatism is all empirical gain, for methodological pluralism permits multiple perspectives upon a research problem, and adds to the likelihood of a defensible account'*, concluding that methodological triangulation is a valuable and viable procedure;
 - III. postmodern approaches acknowledge the role of the researcher in the research process, whereas modernist approaches adopt an objective position which separates the researcher from the research process.
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Despite these strengths there are problems which deserve recognition. As de Pater (1993:176) noted, *'there are drawbacks to everything and postmodernism is no exception'*:

- I. postmodernism raises fundamental questions about how to undertake geographical research practically. For example, extending a postmodern approach to studying farm-based recreation to its logical conclusion would necessitate studying every individual farm, clearly this would only be practical on a very small geographical scale and would necessitate successful contact with all farms;
 - II. postmodernism is incompatible with holistic theoretical frameworks which provide structure to research, a key strength of modernist approaches. Instead, postmodernism presents a series of views employing different theoretical perspectives and methodologies. The credence attached to the employment of many different approaches, and the data they produce, means that there is a lack of a prescriptive set of methods specific to postmodernist research. The employment of different approaches is particularly important if the diversity of recreation is to be investigated successfully;
 - III. the employment of general categories and classifications, a key strength of modernist approaches, becomes highly problematic. This is especially evident in the pluriactivity and earlier farm diversification literature which have made numerous attempts to classify different types of diversification, including recreation. Indeed, terms such as pluriactivity have origins in modernist and earlier attempts to classify. However, as Wither (1996:275) observed, *'classification is intrinsic to knowledge as an inevitable consequence of ordering the world'*. This is particularly important in relation to recreation as it has already been observed that there is a lack of contemporary baseline information on its incidence and distribution;
 - IV. in relation to representation Graham (1995:175) observed, *'few are fluent and communication easily breaks down, inevitably producing a disturbingly disorganised discussion'*. These communication problems represent a significant barrier to the further development and practical applicability of truly postmodern research. This is a serious consideration in the application of postmodernism to the study of recreation because of the lack of basic knowledge about farm-based recreation;
 - V. conceptual eclecticism removes ideas from their original context and this may weaken their theoretical strengths. Murdoch and Pratt (1994) have questioned the compatibility between approaches and argued the need for reflexivity in the use of individual methodologies. Sensitivity was promoted by Gregory (1989:69) who observed that *'if*
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there is then no alternative but to pluck different elements from different systems for different purposes this is not a license for an uncritical eclecticism' and that such combinations must *'display a sensitivity towards the differences and disjunctures between them'*. This is a very important consideration if this approach is to be applied to the study of farm-based recreation.

Nonetheless, while not perhaps a viable alternative in practice, postmodernism still has much to offer. *'Postmodernism provides the much needed scepticism and criticism, so conspicuously absent in modern human geography'* (de Pater 1993:176). Clearly though, it is important to define the extent of engagement with this postmodern rationale. As Philo (1993:430) observed, *'much hinges on what one takes from this strange animal called postmodernism'*.

The study of farm-based recreation provides a valuable opportunity to engage with some aspects of the postmodern debate and in the process to show that postmodern approaches have relevance in a modern agricultural geography, as they are currently in a position of theoretical and methodological under-development. In the light of these observations, the next section of this chapter devises a theoretical approach informed by two complementary strands, an underlying modified political economy position and a postmodern critique. The disadvantages of a truly postmodern approach are such that it is not fully adopted in this study, instead insights from it are employed to generate a postmodern informed analysis.

3.2. Devising the Conceptual Framework.

The preceding discussion has articulated the relative merits and weaknesses of modernist and postmodernist theoretical approaches. It has illustrated the value of aspects from both approaches for this research. It is, therefore, proposed to use postmodernism as a constructive critique in a manner similar to that recommended by de Pater (1993:177) who advocated that *'a course midway between both extremes [of modernism and postmodernism] may be the safest route to a fertile geography'*. In this way, it is hoped that a more balanced approach can be constructed which is both practical and feasible.

The allocation of farm resources to recreational activities is not, as a political economy approach would conceptualise, an outcome of political and economic constraints forced upon the farm business as a result of the capitalist mode of production in which they operate. Conversely, farm-based recreation is not the sole result of decision-making processes internal to the farm business as behaviouralists would consider. The framework

developed adopts an underlying modified political economy approach, recognising that recreation is an outcome of the interaction between both the internal workings of the farm business and external constraints. However, a further degree of complexity is envisaged, whereby a postmodern critique is applied within this modernist framework. This rational engagement with postmodern approaches will incorporate a sensitivity and sensibility to the diversity of all aspects of the farm-based recreation phenomenon and will be employed to inform subsequent empirical investigations. This advocates a revitalised, balanced and strengthened approach to the study of farm-based recreation which attempts to blend the practicalities of established modernist approaches with a postmodernist critique. It is clear that both approaches have much to offer and it is hoped that by combining them in this way it will be possible to develop middle order theorising to access all facets of the farm-based recreation phenomenon. A methodological consequence of this approach is the need to integrate qualitative and quantitative techniques of data collection and analysis.

The theoretical framework presented for the farm-based recreation research (Figure 3.1) draws on the co-evolutionary thinking of Norgaard (1993). Co-evolution emphasizes the mutual dependence between factors. As one changes, so it alters the context for the other, causing it to change and thereby signifying a continuous gradual evolution. This approach has been used within the fields of sociology, biology, agricultural biology and environmental economics, but has yet to be applied in agricultural geography (see Harvey 1989). It is particularly appropriate here because it is sensitive to gradual changes resulting from interactions between economic and non-economic factors. It also emphasizes the role and equality of all components in a complex system.

Five main co-evolutionary components can be identified within the framework:

- I. factors external to the farm business;
 - II. farm resources;
 - III. the farm household;
 - IV. the farm business decision-making process;
 - V. changes in farm business resource allocations (operation, initiation and evolution).
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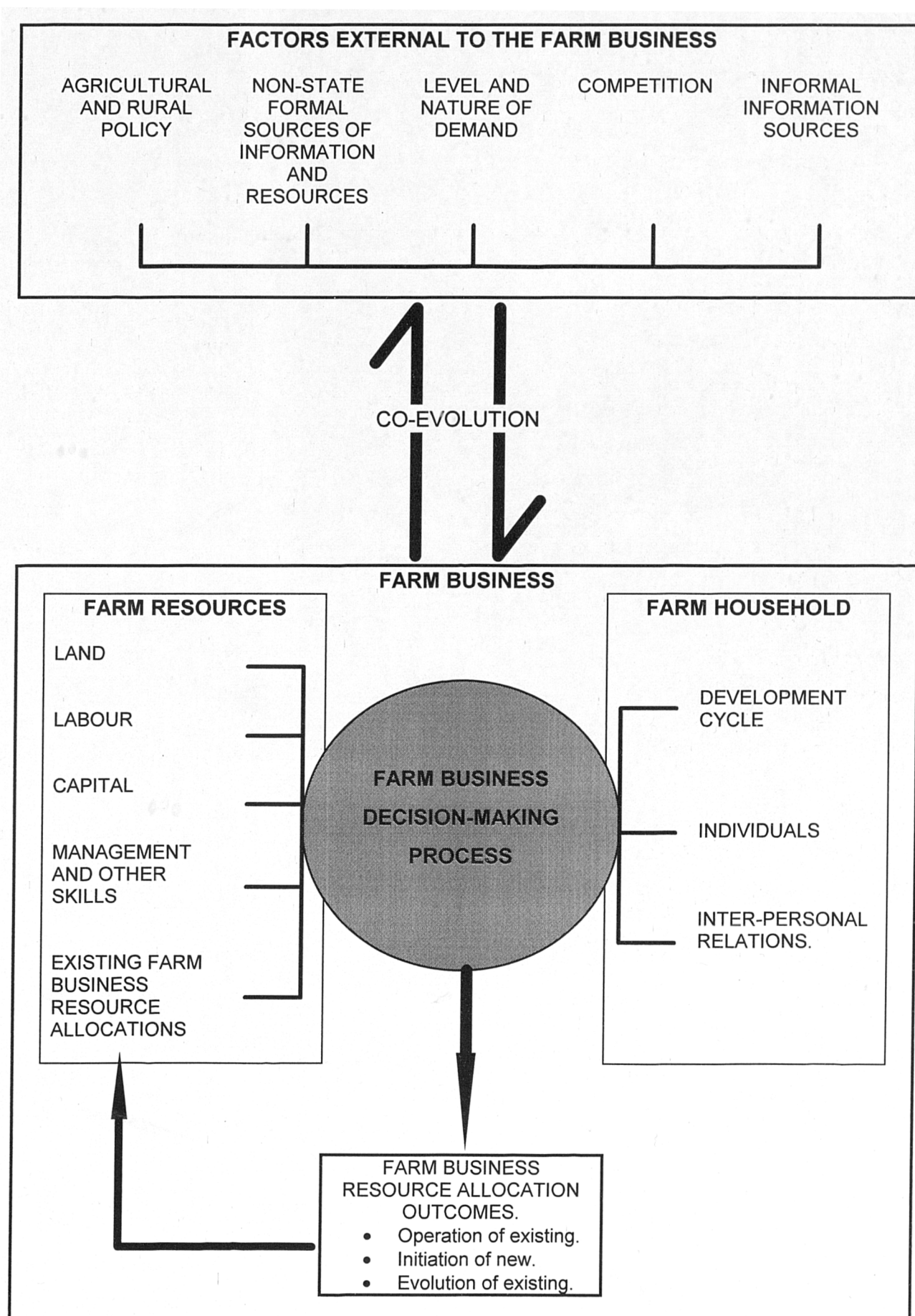


Figure 3.1. A conceptualisation of resource allocation by farm businesses to recreation.

With the exception of the first component which is external to the farm business, the remainder are internal and together comprise the farm business. A range of factors which have a significant influence on the development of farm-based recreational activities have been identified (Figure 3.1). The co-evolution between the farm business (household and resources) and factors external to the farm business through the farm business decision-making process will result in any changes in farm business resource allocations, including the initiation of recreational activities. Subsequently, the continuous co-evolution between these factors will influence the operation and evolution of existing enterprises and the initiation of new ventures. The components of the framework will now be explained in more detail.

(i). FACTORS EXTERNAL TO THE FARM BUSINESS.

External factors comprise those factors outside the control of an individual farm business. In order to operationalise the conceptual framework, the focus is on internal factors (the farm resources, farm household and the decision-making process) and external factors are treated as contextual. The co-evolution between internal and external factors will be appraised through the examination of the farm business (sub-sections (ii) to (v)). It is possible to use the five broad groups of factors external to the farm business identified in Figure 3.1.

(a). Agricultural and Rural Policy.

National and EU agricultural and rural policy measures represent an important contextual factor external to the farm. Agricultural support payment income represents a significant component of farmers' income in the UK. A major factor is the increasing level of financial pressure which is being exerted on farm businesses over time. This escalating pressure on incomes through, for example CAP reform, may encourage farms to divert resources into non-agricultural enterprises, such as farm-based recreation. As Halliday (1989) noted in the case of Devon farmers, while preferring to concentrate resources into existing enterprises, in the light of declining farm incomes, increasing numbers of farmers may reach a threshold of resistance which will necessitate them to divert resources.

The England and Wales rural development plans (2000-2006) outline new proposals for supporting farm diversification, however, since the withdrawal of the FDGS in January 1993, as a result of over-subscription, there has been no nationally available direct assistance for the development of farm-based recreational activities. This illustrates how circuits of public capital may switch to support different objectives (Evans and Ilbery 1989). This approach to

the resolution of income pressure on farm households also provides a mechanism for contributing to the increasing demands for alternative activities in the countryside, such as recreational facilities, small industries and holiday accommodation (Edmond *et al* 1993). Some support for farm diversification has been available in specific areas through rural development programmes, for example through the EU Objective 5b (1994-1999) programme, through the Rural Development Programme run by the Regional Development Agencies and from Local Authorities and Regional Tourist Boards.

A range of government agencies, including FRCA, the Countryside Agency and regional tourist boards, provide advice and services to farm businesses developing and operating recreational ventures, although much of this has been moved to the private sector. Regional variations in the provision, management and distribution of free advice may affect the development of farm-based recreation. Areas with a history of alternative farm enterprises may have a better infrastructure for distributing advice from organisations.

A range of other legislation impinges on farm business resource allocation decisions. This includes, taxation, health and safety and planning and tenancy. Taxation represents an external factor which may have a significant influence on farm businesses' activities and structures. Health and safety legislation is also particularly relevant for farm-based recreation, and especially farm attractions. Planning policy and local government implementation of National policy measures are likely to influence the spatial distribution of farm-based recreation at a regional level. The development of recreation in certain rural locations may be constrained by planning restrictions which, for example, limit the scale of development and prevent the initiation of viable enterprises (Evans 1990). Such processes have been observed in National Parks (Bateman and Ray 1994) and green belts (Ilbery 1991).

Clearly, it is necessary to consider the whole suite of external factors which influence farms if the processes by which individual farms respond to this range of factors by allocating resources to recreational activities instead of agricultural production or other forms of pluriactivity are to be identified.

(b). Non-State Formal Sources of Information and Resources.

External formal sources of information and resources comprise a second theme. Farm-based recreation represents a business opportunity in the growing tourism sector of the economy, which typically requires access to capital, advice and marketing.

In terms of non-state sources of capital Ilbery (1996) observed that the main source of capital for farm attractions was bank loans, reinforcing the absence of contemporary sources of state finance. Again, the diversity of different recreational options means that, although special terms may be available to farms, lending is likely to be extremely dependent on individual circumstances. This is coupled with the caution of the High Street banks which will inevitably vary through time. The diversity of farm-based recreation means that a wide range of potential sources of non-state finance exist, depending upon the exact type of recreational development, for example charitable sources for educational developments.

Marketing skills have not been a traditional strength of farm businesses because of price support structures for many agricultural commodities. However, recreation and other farm diversification activities require marketing. A range of marketing groups has developed to meet some of these requirements. Farm Attractions Groups (FAG) have developed as coordinating organisations for the promotion, marketing and development of farm-based attractions for example, through the production of a combined brochure, attendance at agricultural shows and pooling specialist skills. Their development in England and Wales is a relatively new phenomenon.

Ilbery (1996) presented an initial commentary which by necessity is primarily descriptive and exploratory in nature. The first county to form a co-operative FAG was Northamptonshire in 1988. Access to such marketing structures will vary with time, as observed by Ilbery (1996) who charted the geographical development of these county groups from 1988 to 1994. The number of groups has increased at a dramatic rate, from less than 5 in 1991 to 16 in 1994. There is just one farm attraction group per county, although the geographical extent of each group does not always follow county boundaries. By the end of 1993, there were 171 members of the 12 established FAG. These ranged in size from 9-24 members per group with an average of 14 in each group (Ilbery 1996). The rapid development of county farm attraction groups resulted in the formation of a national coordinating group the National Farm Attractions Network in 1993. Membership of these groups may be important, as restrictive criteria have been observed by Ilbery (1996) in relation to some county FAG. The recent evolution of county FAG and the NFAN means they have been the subject of remarkably little research and a great deal more detailed work is required to advance research in this area.

Overall, however, the marketing infrastructure for farm-based recreation is not as well

developed as that observed by Evans and Ilbery (1989) in relation to farm-based accommodation which represents a more homogeneous product, more suitable for integrated marketing and booking. Instead, a variety of activity specific marketing groups and associations are associated with recreation.

(c). *Informal Information Sources.*

A third component external to the farm are informal information sources. These comprise non-farming family members, social networks and reference groups (such as farmer discussion groups), friends, neighbours and the media. Factors such as these and, for instance, the visible success, or failure, of other peoples' enterprises may influence the development of farm-based recreation. Media attention to recreational activities may promote or constrain their development. There has been very little research on the role informal information sources, for example the role of media representativeness in the initiation of either on-farm or off-farm pluriactivity (which is generally confined to the fringes of the agricultural media which concentrate on mainstream food production).

(d). *Level and Nature of Demand.*

The level and nature of demand is likely to be a key factor influencing the development of recreational activities. Geographically, farm-based recreation is most likely to be found on farms in areas such as well-established tourist destinations and within a day's travelling distance of large concentrations of population, giving rise to two distinct markets for farm-based recreation. The contrasting level and nature of demand from these markets will encourage differences between types of recreational provision at a regional level. For example, demand in established tourist destinations is likely to be highly seasonal, areas with a lower potential demand may still be able to support smaller scale recreational activities or niche market activities. The changing nature of the rural population (Champion and Watkins 1991, Boyle *et al* 1998) and the urban-rural shift in industry in the 1980s (Healey and Ilbery 1985) have created new potential markets with the movement of people to rural areas being dominated by the higher socio-economic classes. Such 'newcomers' generally have the means to pay for services such as farm-based recreation. Trends in increased mobility, leisure time and disposable income levels of the population also contribute to the demand for recreation. A second aspect of demand relates to the level and nature of demand off-farm for farm resources, for example local labour market conditions are likely to influence the up-take of off-farm employment.

(e). Competition.

A final component external to the farm business is competition. Non-agricultural operators may investigate the potential of rural recreational enterprises as an attractive business opportunity. The growth of local, farm or non-farm, competition may be an important factor influencing the development of farm-based recreation. Local competitors have been observed to be an important factor influencing farm-based diversification enterprises (Evans and Ilbery 1989, Edmond *et al* 1993). The quality treadmill effect, observed by Evans and Ilbery (1989), may be an important spatial determinant in areas of high competition which necessitates investment to be made at a farm level. This will influence the development of existing enterprises and, more importantly the evolution, including contraction and withdrawal, of enterprises.

(ii). FARM RESOURCES.

Farm resources are internal to the farm business and relate to land, labour, capital management and other skills and the existing resource allocations of the farm business. The particular configuration of land, labour and capital resources of the farm will affect the development of different types of pluriactivity.

(a). Land, Labour, Capital and Management and Other Skills.

The relationship between land resources and the provision of different forms of pluriactivity has been widely researched (Chapter 2). Characteristics such as land area, land tenure and land quality have all been shown to be associated with recreation, although providing empirical data cannot explain the occurrence of different types of recreation. A further complication related to land and the provision of recreation is that land use by recreation may be non-exclusive and take place alongside agricultural uses. Co-evolution with factors external to the farm may result in changes in farm size, via selling/renting out or purchasing/renting in, and changes in tenancy arrangements. For example, the impact of the introduction of the new flexible (short-term) farm business tenancies in the Agricultural Tenancies Act 1995 remains to be investigated. It may promote the development of certain types of recreation and restrict the development of other types.

The labour resources available to the farm business can be divided into two types, household and hired. Household labour resources fluctuate according to the family development cycle (see iii). The hired labour resources of a farm business are related to its existing resource allocations and their associated labour requirements (over and above that

which can be met with family labour, where it is present). Under-utilised family or hired labour, for example as a result of the seasonal labour requirements of agricultural production may be allocated to recreational activities and certain types, small scale and non-adjustment forms of recreation may be particularly suited to these circumstances.

Falling farm incomes mean that many farmers do not have the necessary resources to invest in alternative enterprises. A lack of capital has been cited frequently as a major constraint on the development of tourist enterprises (see Chapter 2). However, conversely Bateman and Ray (1994) identified indebtedness as a pressure pushing household members to seek sources of supplementary income. A variety of possible sources of grant or loan capital have been identified external to the farm. In other cases, farm businesses may have surplus capital and recreation may represent an attractive investment. Capital requirements of many recreational activities have been shown to be low compared to other diversification options and agricultural investment (although returns are also low), especially in relation to the non-adjustment component. Consequently, a lack of capital resources may not be as significant in constraining the development of recreation as other on-farm pluriactivity, although it may influence the scale of development.

The management and other skills at the disposal of the farm business are closely related to the individuals in the farm business, their backgrounds and education. Education levels have been shown to be related to the occurrence of pluriactivity. For example, sons/daughters-in-law may bring new skills to the business. Agricultural enterprise management skills do not necessarily translate into the ability to operate successfully a recreational activity. Marketing skills in particular are likely to play an increasingly important part in the successful operation of farm-based recreational enterprises that are exposed to increasing competition from both within and outside agriculture. This observation can be applied equally to non-financially motivated activities which still require operational management. Skills and expertise can be gained through co-evolution with training providers external to the farm, although the uptake of agricultural training by farmers has been notoriously low (possibly because of the accompanying need for relief services), or by employing individuals with specific skills or expertise.

(b). Existing Farm Business Resource Allocations.

The existing allocation of farm land, labour and capital resources to agricultural production in the form of farm type has already been shown to be an important factor influencing the development of pluriactivity (Chapter 2). Differences between the incidence of different

types of recreation have been shown to be associated with certain farm types. For example, several authors including Bull and Wibberley (1976) and Davies (1973) have observed that recreational activities are commonly associated with low intensity livestock farms, possibly reflecting the fact that the stock themselves may form part of the attraction. Consequently, the distribution of recreation is likely to reflect the regional pattern of farming types in England and Wales. At a farm level, the characteristics of individual farm types, such as configuration of workload, resources (for example irrigation reservoirs), seasonality of production, are likely to favour individual types of recreation, however, few studies have differentiated to this detail. The occurrence of recreation as a non-exclusive or secondary land use means that certain types will be strongly linked to arable or grassland systems.

The preceding discussion has concentrated solely on the relationship between agricultural resource allocations and the provision of farm-based recreation. However, an over-emphasis on agricultural resource allocations disguises the occurrence of recreation alongside other non-agricultural resource allocations. Despite the plethora of research detailing the incidence of different types of pluriactivity, relatively little work has identified farm-level combinations. Evans and Ilbery (1993) highlighted one form of active integration where farms with accommodation ventures in well-established tourist destinations were seeking to exploit niche markets, by integrating accommodation with recreation as activity holidays, as a response to competition. However, the relationship between recreation and other forms of pluriactivity requires more investigation. For example, off-farm employment as a teacher might be related to the provision of farm educational visits.

(c). Typologies of Farm Business Resource Allocation.

The characterisation of combinations of different farm business resource allocations in the form of strategies or pathways has formed a significant focus of research in agricultural geography. There are two notable examples; Marsden *et al*'s (1986a) restructuring strategies and Bowler's (1992a) pathways of farm business development. Although similar, these have quite distinct foci relating to the broad mode of economic operation of the farm business and the precise mode of farm business resource allocations respectively.

The typology of Marsden *et al* (1986a) is based around the extent to which farm households have sought alternative sources of income and capital (the decline in the economic centrality of agricultural income). They identified this as a key issue in the internal transformation of the farm business and used it as an indicator of the variety of relations farm businesses had developed. Three broad strategies adopted by farm households in response to restructuring

are identified:

- I. hobby and retired part-time farmers;
- II. survival strategies;
- III. accumulation strategies.

These types are characterised by Marsden *et al* (1986a) as strategies for coping in capitalist agriculture. They represent strategies implemented by farm families in response to difficulties of maintaining business viability over time.

In contrast, Bowler (1992a) put forward 7 pathways of farm business development:

- I. extension of industrial mode of farming: traditional products;
- II. redeployment of resources into new agricultural products (agricultural diversification);
- III. redeployment of resources into new non-agricultural products (structural diversification);
- IV. redeployment of resources into off-farm OGAs;
- V. traditional farm production with lower income/inputs;
- VI. hobby or part-time farming;
- VII. retirement from farming.

These are based primarily on alternative income sources available to farm businesses. Unlike Marsden's strategies, they are not mutually exclusive and farms may adopt a combination of pathways.

Both these approaches have oversimplified complex household responses around economic relations, a central theme of political economy. The application of these concepts to farm-based recreation is particularly problematic for the following reasons:

- I. studies employing these approaches have implicitly included farm-based recreation as a form of economic adjustment or a possible component of a farm business strategy. However, a large element of recreation lies outside the scope of these studies and is not undertaken as part of a farm restructuring strategy/adjustment pathway but for other reasons, like individuation and altruism;
 - II. the application of an economic/non-economic distinction is not straightforward because the precise point at which recreation becomes part of farm adjustment is difficult to
-

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- define. Further, there may be a host of intermediate transitional positions from adjustment to non-adjustment forms and vice-versa. Indeed, adjustment and non-adjustment forms may occur simultaneously on the same farm;
- III. nonetheless, non-economic resource allocations, such as some forms of recreation, represent an allocation of farm resources and, therefore, a form of farm adjustment. It is only possible to generate a comprehensive understanding of the process of farm business resource allocation if all farm business resource allocation decisions, both economic and non-economic, are considered as interrelated. The allocation of resources in economic spheres may impact on non-economic allocations and vice-versa;
 - IV. a further element that is neglected in these typologies is the allocation of farm business resources to conservation/environmental activities, for example through agri-environment schemes. The allocation of farm resources to these activities has received considerable research attention but has yet to be incorporated into these models (see Evans and Morris 1997);
 - V. the focus of both these classifications is biased towards pluriactivity and they largely neglect agricultural changes, even though Munton (1990) identified agricultural enterprise changes as the dominant element of adjustment undertaken by farm businesses. This is likely to be especially true where agriculture is the dominant income generator. Adjustments in marketing agricultural products (for example through quality assurance and branding), and changes in the organisation of agricultural resources (for example through co-operation between farms, and labour and machinery rings) are not catered for in these classifications;
 - VI. the notion of strategies or pathways as 'outcomes' implies that these are planned reactions to similar circumstances, rather than similar outcomes in relation to very different factors. A postmodern approach focuses on the factors underlying the outcomes, rather than the outcomes themselves;
 - VII. in relation to Bowler's (1992a) pathways, which are not mutually exclusive, there has been a tendency to focus on each pathway separately, rather than examining complex combinations of pathways with each other. For example, there has been very little research which identifies the provision of recreation in combination with other resource allocation pathways, and the interactions of these combinations (with the notable exception of the Arkleton Trust 1992).

This critique reinforces the limitations of employing approaches grounded in political economy for the study of the recreation phenomenon. It highlights the way in which some farm business resource allocations have been neglected and the way in which economic and

non-economic resource allocations are intrinsically linked. It demands a focus on factors underlying resource allocations and an understanding of all farm business resource allocations in combination.

(iii). THE FARM HOUSEHOLD.

According to Gasson *et al* (1988), well over 90% of UK farm businesses are family businesses (see Chapter 2 for a full discussion). Family businesses clearly have a number of benefits over businesses operating with corporate management structures. These advantages relate primarily to the proximity, convenience, flexibility and ease of working with family labour, the family as a source of both investment capital and information on business opportunities and the ability to adjust personal consumption (unlike wages). Family run farms, where capital and labour are combined, remain remarkably persistent and still dominate agricultural production units despite the presence of large agri-businesses operating with corporate business structures.

Consequently, the approach adopted by this study is orientated towards family farm businesses. However, a postmodern sensitivity to difference must recognise both the unique nature of individual farm businesses and the importance of those farm businesses which do not conform to this type and which may encapsulate important processes in the provision of farm-based recreation. There is some evidence to suggest that large agri-business interests exhibit a low involvement in diversification activities possibly because they focus on achieving economies of scale in agricultural production. Alternatively, however, on-farm pluriactivity, including recreation, may represent a market opportunity which these businesses are well placed to exploit.

(a). Farm Household Development Cycle.

A major characteristic of farm households is their association with a family development cycle. Marsden *et al* (1987) termed this 'family time'. There have been several attempts to produce a classification of the stages of the cycle; for example, Nalson (1968) identified three phases of family development (Figure 3.2), while (Jones 1973) envisaged six stages which bore a relationship to the acceptance of farming changes.

In reality, each point in the development cycle represents a unique set of circumstances and Nalson's representation oversimplifies a complex dynamic process. A postmodern critique identifies three specific issues in relation to this classification. First, that the concept of a family development cycle can be superimposed on to the wider notion of a farm household

(which includes all individuals living on the farm who are wholly or partially dependent on the farm business, or vice versa). Secondly, it should be recognised that rather than a series of discrete stages the cycle is continuous, and that each point on the cycle is unique, and that an appreciation of the dynamics of farm businesses may be hampered by having too static a conception of the farm family unit. Thirdly, it is appreciative of the growth of non-conventional 'family' structures, for example as a result of divorce.

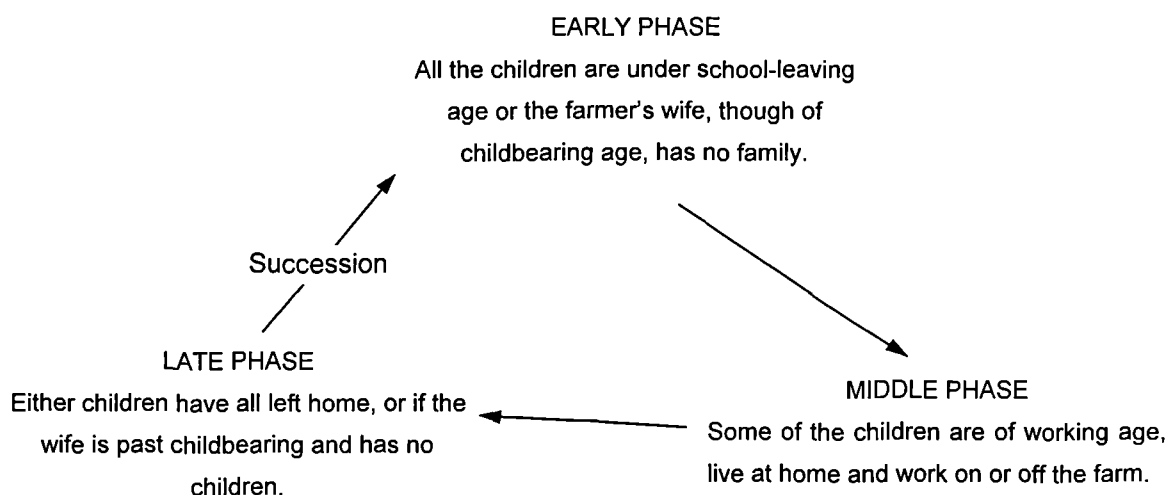


Figure 3.2. Stages in the farm family development cycle (After Nalson 1968).

The position of the family in its development cycle has been observed to have a critical influence on the relationship between a family farm and its resource allocations (Nalson 1968, Bouquet 1982, Gasson *et al* 1988, Potter and Lobley 1996) (Chapter 2). Clearly, farm family structures are dynamic and the human and capital resources available on a family farm will not be constant over time. The changing balance between capital and labour resources is an important process which may result in labour and/or capital being either in surplus or in deficit and which may result in a range of adjustments being made including; farm diversification, increasing the area of land farmed, substituting family labour for hired labour, finding off-farm / non-agricultural employment, or altering the intensity of the farming system. Engagement with recreation, and different types of recreation, is likely to vary according to stage of development cycle, for example it might be a response to utilise family labour on the farm, but has rarely been investigated.

Generational considerations, especially succession, may be a particularly important point in the development cycle. The objective of most family run businesses to pass the business on to the next generation has been shown to be a major factor influencing resource allocations.

Farm-based recreation represents a possible response to maintaining business continuity as an important co-evolution between the farm household decision-making process and the position in the development cycle. As Marsden *et al* (1986a) observed, a major reason for diversification is to maintain a viable unit for succession.

Hastings (1984) noted that on larger farms, successors were more likely to control individual enterprises within the farm business, before assuming overall control. This observation may be applicable to farm-based recreational activities, although few studies of on-farm pluriactivity have considered the roles of all household members. Successful succession of farm businesses is dependent on a range of factors such as; the presence of a potential successor, their level and nature of involvement in the business, the successors willingness and ability to take up managerial control, a farmer's perception of his/her successor's ability, the income earning potential of the farm and opportunities for off-farm employment (Hastings 1984). Consequently, not all farm family businesses secure succession of the business. Where succession does not occur, new entrants may bring different skills and their own aspirations.

(b). Individuals in the Farm Household.

The co-evolution of individuals with farm business resources and external factors influences the way individuals hold a variety of personal goals and values. Gasson (1973) recognised that farm household individuals hold a variety of goals and values in relation to farming besides economic gain. She proposed a four-fold classification of objectives associated with farming as an occupation. These encompass the values and goals of farmers which influence choices:

- I. instrumental. Farming viewed as a means of obtaining income and security with pleasant working conditions;
- II. social. Farming is carried out for the sake of interpersonal relationships, such as social prestige or continuing the family tradition;
- III. intrinsic. Farming is valued as an activity in its own right, such as enjoyment of work and independence;
- IV. expressive. Farming viewed as a means of self expression or personal fulfilment.

It has been observed that profit maximisation is usually not the primary goal of the farm business; many farmers place a higher value on security and long-term business survival

than on profit itself. Since the farm combines work, home and leisure in one place, the commitment to maintaining it usually outweighs other considerations (Brooks *et al* 1986).

In relation to pluriactive resource allocations, DART (1974) identified four main motives behind the initiation of farm-based accommodation: financial, social, interest and altruistic. Similar motives towards farm-based recreation were reported by Bull and Wibberley (1976). There has been a strong tendency in the pluriactivity/farm diversification literature to concentrate on the financially motivated component. However, social and interest motives were reported by Ilbery (1991) as particularly important in relation to farm-based recreation. The importance of interest motives in relation to recreational activities can be attributed to the interests and hobbies of individuals in the farm household, and may enable individuals to fulfil their leisure aspirations. Recreational activities may also fulfil an important social function for farm household members, through both interaction with the public and the farming community. However, individuals may also be concerned about how certain farm-based recreational activities might influence their perceived identity as a 'farmer' by their farming peers and the local community. This reinforces the importance of non-economic motives in relation to recreational resource allocations.

Many studies of farm diversification and pluriactivity, which necessarily include recreation, have employed modified political economy approaches. These have tended to privilege the study of financially motivated activities over the non-financially motivated. Postmodern explanation necessitates a human scale of investigation and, therefore, a greater understanding of decision-makers as unique agents. In this sense, a closer consideration of the attitudes and motives which differentiate individuals is paramount.

(c). Household Inter-personal Relations.

The interaction between individuals, particularly in the form of gender relations, within the farm household, has received some research attention (Whatmore 1991, Gasson 1992, Evans and Ilbery 1996, see also Chapter 2). Historically, the transfer of farms through inheritance and succession, primarily to sons, has meant that farm men have provided continuity between generations. Such a male farming tradition was reported by Evans and Ilbery (1996) who found that 80% of farm husbands with farm-based accommodation had at least one parent who is / was a farmer. This predominantly agricultural background represents a considerable influence on the future development of the business. In contrast, the backgrounds of farm wives present an opportunity for the incorporation of different experience into the decision-making process (even though many farm wives may be from an

agricultural background). For example, younger women are less prepared to conform to traditional gender roles (Whatmore 1991).

The interaction of household gender relations may represent a significant influence on the plurality of the decision-making structure, and therefore household resource allocations, such as pluriactivity. As Gasson (1988a and 1992) noted, the growing need for alternative income has encouraged pluriactivity which has particularly been associated with farm wives. In these cases, gender relations may also have a significant influence on the initiation, operation and evolution of different types of recreational activities on farms. For example, in parallel with work on accommodation by Evans and Ilbery (1996), earnings from farm-based recreational activities controlled by the woman can increase her economic independence. However, this will not necessarily lead to a greater level of power in the business matters of the farm household. Equally, a farm-based recreational enterprise controlled by the husband may result in the wife having a greater involvement in agricultural work and increased power in the decision-making process without necessarily any independent earnings.

Inter-personal relations will continually change throughout the development cycle, influencing the decision-making process (Whatmore 1991). Gender relations will also be influenced by external factors. For example, changes in legal partnership arrangements and trusts as a response to tax considerations have been observed by Marsden *et al* (1987). In these circumstances, a more pluralistic decision-making process may be promoted. Gasson (1988a) noted that off-farm pluriactivity by farm household members facilitates exposure to a wider set of cultural values which may impinge on gender relations.

The links between gender and pluriactivity demand more attention if an increased understanding of the behaviour of farm households is to be obtained. Indeed, this presents research with opportunities to investigate further the implications of pluriactivity on farm wives and the gradual erosion of traditional patriarchal gender relations. More ethnographic work to explore the ways in which both business and household relations are changed over time by pluriactivity was advocated by Evans and Ilbery (1996). However, when considering inter-personal relations, it is important to consider the whole household in any analysis. Bateman and Ray (1994:4, emphasis added) suggested that 'the socio-economic health of the farm and those involved in its operation are inextricably linked to the activities of the *whole* household'. Existing research has tended to privilege husband and wife relations over relations with other household members. Indeed, there has been a widespread failure to

acknowledge the existence and role of less conventional family situations. A postmodern approach is valuable because it acknowledges the uniqueness of individual households along with a more careful recognition of the significance of all individuals in the household. This is particularly relevant given the complexity of farm-based recreational types already identified and that household arrangements are likely to be a strong explanatory factor for specific types/combinations of recreational activities.

The interaction of individuals in the farm business represents a major component in any study of farm-based recreation. Previous studies grounded in political economy approaches have emphasized the impact of pluriactivity on bi-polar gender relations between husband and wife and focused on the destination of income from pluriactivity involving the farm wife. Undoubtedly, the emergence of pluriactivity as a major strand of investigation of household activities in the agricultural sector lends itself to a gender based investigation due to the nature of many enterprises which it encompasses. However, this has obscured the importance of wider inter-personal relationships, regardless of gender, within the farm household, particularly in the provision of non-commercially motivated household activities, which may include recreational activities. It is also important not to neglect inter-personal relationships between household members and individuals external to the farm business, such as advisers.

(iv). THE FARM BUSINESS DECISION-MAKING PROCESS.

Within the conceptual framework, farm business decision-making processes are central to the resource allocation process. As already shown any farm business has, at a given point in time, a combination of resources and management or other skills at its disposal (farm resources) and a given set of social and demographic characteristics (farm household). Farm business decision-making represents the outcome of a continuous co-evolution between the farm household, farm resources and external factors. The decision-making process can initiate changes in farm business resource allocations in response to this co-evolution, for example, in response to the problem of falling farm income, the opportunity to accumulate more capital, or provide an educational service. Consequently, it is necessary to examine the decision-making process. This encompasses a complex interaction of factors which control household power relations. Evans and Ilbery (1996:75) defined such relations as *'the position of control determined by participation in decision-making which influences the destiny of business and household'*.

The extent to which individual household members contribute to the decision-making

the survival of farm businesses. These 'other' family members represent an important consideration in a postmodern informed investigation.

Farm business decision-making processes typically involve several individuals with a variety of objectives and goals. The way in which these are mediated is a complex process which determines business goals and objectives (such as continuity of the farm) and household consensus or individuation. The decision-making process and the means by which differences are resolved has received scant attention in the literature (with the notable exception of Blanc and MacKinnon's (1990) negotiation hypothesis). Farm business resource allocations subsequently reflect this continuous process. Importantly, recreation can fulfil a wide variety of economic and non-economic goals of both individuals and business. For example, recreation can fulfil an economic role assisting in agricultural business survival, assist generational transition, represent a commercial opportunity, facilitate disengagement and exit from farming (perhaps where household goals are no longer continuity of the farm) and the fulfilment of individual social, interest and altruistic motives. In many cases recreation can satisfy both business and individual considerations simultaneously.

Search-based models of decision-making have been widely applied to farm resource allocation decisions (Bowler *et al* 1996, Ilbery *et al* 1996, Ilbery *et al* 1998). Such models assume that when a farm business reaches a critical threshold it initiates a search process to evaluate all possible alternative resource allocation options, before selecting and pursuing the most appropriate one. However, a postmodern informed conceptual position highlights three key weaknesses with this model. First, there is an assumed rationality in decision-making. It can be argued that few decisions are actually the result of a pre-determined rational long term strategy, even though they may be justified as so. Secondly, there is no room within this model for the role of chance and unforeseen events and the gradual evolution of resource allocations. The management of any business takes place within an ever-changing co-evolutionary environment which can quickly overtake the best of plans. Thirdly, the model assumes a collective response and leaves little room for individuation in resource allocation decisions.

(v). FARM BUSINESS RESOURCE ALLOCATION OUTCOMES.

The final component in the framework conceptualises three specific outcomes from the farm business decision-making process:

-
- I. operational decisions relating to existing resource allocations;
 - II. the initiation of new resource allocations;
 - III. the evolution of existing resource allocations, in the form of modification, expansion, contraction and withdrawal.

Decisions about the operation of existing resource allocations relate to day-to-day operational decisions whereas the outcomes of initiation and evolution necessarily result in more fundamental changes in the existing resource allocations of the farm business (Figure 3.1). Such changes are in-turn associated with co-evolution in the farm business and between the farm business and factors external to the farm business, for example the impact of recreational activities on the local economy. A closer examination of these specific processes in relation to recreation, as outlined in Figure 3.1, will permit the identification of the important factors and their interactions influencing the development of different types of farm-based recreation. For example, the initiation of new resource allocations is likely to be associated with a commensurate evolution of other resource allocations. Previous research has tended to view recreation, and other pluriactivity, as a static outcome rather than a constantly evolving process, consequently the modification, expansion, contraction and withdrawal of pluriactivity has rarely been considered. This is particularly important as many recreation types, especially events, can change rapidly.

3.3. Summary.

The study of farm-based recreation has been severely hindered by a lack of theoretical conceptualisation. This chapter has been concerned with the construction of a conceptual framework to facilitate an empirical examination of the inter-relationships between farm businesses and their allocation of resources to recreational activities. The framework presented synthesizes the underlying principles of the established modified political economy approach in agricultural geography with insights from postmodernism in rural geography as represented by the 'cultural turn'. It represents a rational, sensible and profitable approach which combines the major strengths and takes account of the criticisms of both perspectives. There are five main points which capture the key elements of the framework.

1. The conceptual framework put forward here adopts an underlying modified political economy perspective, coupled with a postmodern critique. This blend of modernist and postmodernist perspectives represents a rational, sensible and profitable approach. In this theorisation, the major strengths of both approaches are integrated and criticisms of both approaches are considered. This represents an ideal way to make modernist and
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postmodern approaches more relevant to geographical research in agriculture.

2. Factors external to the farm business are identified. These are outside the control of an individual farm business. In order to operationalise the conceptual framework, the focus is on internal factors (the farm resources, farm household and the decision-making process) whereas external factors are treated as contextual. The co-evolution between internal and external factors will be appraised through the examination of the farm business.
3. An internal farm business component is identified. This is comprised of three distinct elements; farm resources, the farm household and the farm business decision-making process. The latter process is conceptualised as resulting from the continuous co-evolution between external factors, the farm household and farm resources.
4. Changes in farm business resource allocations represent the outcome from the farm business decision-making process. Two distinct types of resource allocation changes are conceptualised. The initiation of new recreational activities and the evolution of existing recreational activities. These changes necessarily impinge on the existing resource allocations of the farm business and consequently feedback into the continuous co-evolution between the internal and external components.
5. The key values of the framework to an examination of farm-based recreation are a sensitivity and attention to difference and detail to the diversity of farm-based recreational activities and the farm businesses on which they occur. This has been conspicuous by its absence in earlier work. Methodologically it supports the combination of different approaches, recognising that different aspects of the complexity of farm-based recreation are best explained using different approaches and by generating multiple insights. A flexible methodology can therefore be used to ensure that the analysis is sensitive to the great diversity of both recreational activities and the farm business forms within which they are enmeshed. This type of middle order theorising which builds on existing conceptual research and establishes themes that are more readily investigated empirically permits a strong link between theory and practice. Such a link is seen as a vital step towards gaining a fuller understanding of farm-based recreation.

The framework put forward here will now be operationalised. Chapter 4 will consider the methodology and techniques that will facilitate an analysis of farm business resource allocations to farm-based recreational activities.

4. Research Methodology and Techniques.

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The previous chapter demonstrated the need for a modernist approach coupled with a postmodern critique to inform the study of farm-based recreation. This chapter takes direction from this approach and outlines the research methodology and techniques needed to satisfy this need. It details the development of a two stage methodology for the collection and analysis of primary data on farm-based recreation. The discussion involves a consideration of the methodological and analytical techniques employed at each stage. The first stage of primary data collection and analysis is discussed in sections 4.1 to 4.3. These focus on the requirement for, and selection of, study areas and are concerned with how the selection of study areas is employed as a sampling frame. The methodology for the collection and analysis of detailed primary data, within this sampling frame, is also developed. The second stage of primary data collection and analysis, which builds on the first stage, is presented in section 4.4.

4.1. The Selection of Study Areas.

(i). THE RATIONALE FOR THE SELECTION OF STUDY AREAS.

Chapters 2 and 3 have already identified the potential diversity and complexity of the farm-based recreation phenomenon. The difficulty of investigating this diversity is exacerbated because the annual agricultural census fails to collect any information relating directly to farm-based recreational activities, or any other farm diversification activities. As a consequence, studies of the farm-based accommodation component of farm tourism have often taken advantage of a heavy dependence on advertising. This, for example, enabled a detailed and almost uniquely comprehensive study of the distribution of farm-based accommodation from a relatively small number of accommodation guide books (Evans 1990). However, the compilation of a national database on farm-based recreation, similar to that achieved by Evans (1990) for farm-based accommodation, is not a feasible approach for two reasons:

- I. there are a large number of different recreational activities which can be grouped into the five distinct categories, based on availability, as outlined in Section 1.4(iv);
- II. farm-based recreational activities can disguise a complex multitude of motives as, for example, some educational visits to farms may be free whilst others may operate multiple recreational activities for economically very significant reasons.

The combination of these factors means that information on farm-based recreation from

secondary data sources is fragmented. Indeed, this fragmentation is apparent in seven commonly used sources.

- I. *Advertising.* A variety of different strategies are employed here, varying from no formal advertising to national advertising. Certain types/scales of recreational activities may be highly dependent on formal advertising whereas other types/smaller scale activities may use very little advertising. For example, a 'lambing day' might simply rely on a temporary roadside advert whilst rare breeds farms may require glossy colour brochures to attract visitors. Clearly, the range of advertising strategies means that easily-available national sources will be biased towards certain recreational types and will miss those activities which either do not advertise or employ more localised and temporary strategies.
 - II. *Local Authority Lists.* Typically these lists, where they do exist, only include licenced establishments. They are thus biased towards a minority of recreational types at the expense of the bulk of recreational activities which do not require licencing.
 - III. *Planning Applications.* Similarly, there are no consistent records, such as planning applications, which encompass all the relevant types of recreational activities. Certain activities require planning permission for change of use. However, many types of recreation are exempt or can be changed/added within the scope of existing permissions.
 - IV. *Clubs and Organisations.* The various clubs and organisations associated with different recreational activities can provide a source of information. However, the complexity of identifying and contacting all of these which, in any case, are not farm specific, do not cover the full spectrum of recreational activities and only include those facilities whose operators are members, again precludes this approach.
 - V. *Marketing Groups.* The development of marketing groups, such as the FAG and NFAN, is a relatively recent phenomenon and these groups do not presently cover the whole of England and Wales (see Ilbery 1996). In many cases, these groups are selective and are orientated towards commercial attractions. This means that the full spectrum of recreational activities is not usually represented. In the same way, the NFU produces an annual list of open days and events on farms. Unsurprisingly, this is agriculturally-orientated and so does not include non-agricultural activities.
 - VI. *Previous Academic Research.* There are a lack of useful secondary data from previous research, specifically in relation to farm-based recreation. This results from the limited amount of research on this topic and past confusion between the terms recreation, accommodation and tourism (see Chapters 1 and 2).
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VII. *ADAS and Tourist Boards.* The National Farm Attractions Survey (ADAS 1994) used ADAS lists and Tourist Board contacts to provide a sampling frame. This approach is suitable for research into farm attractions because it concentrates primarily on larger providers and members of marketing groups. It is less suitable for the wider and, therefore, arguably more important phenomenon of farm-based recreation where a significant number of small scale operators are known to exist. This example also provides an effective illustration of the problems of attempting to compare farm attractions and farm-based recreation.

These factors mean that a comprehensive survey is not possible and a different approach is necessary. They also help to explain the lack of recent research into farm-based recreation. Clearly, if the geography of farm-based recreation is to be explored, a selection of initial sampling areas is required. However, few studies have proposed a rigorous justification for the selection of such sampling areas. In the light of these observations, the next two sub-sections address the development of a stratified sampling frame, based primarily on secondary data from the Agricultural Census of England and Wales (MAFF 1994), to structure the selection of sampling areas and future research.

(ii). *SAMPLING FRAMES FOR FARM SURVEYS.*

Three notable studies have discussed sampling frame methodologies for farm surveys which can most usefully be applied in specific areas. Clark and Gordon (1980) compared the use of random numbers and clusters of holdings, Errington (1985) evaluated a number of different sampling frames and Emerson and MacFarlane (1995) investigated comparative bias between a range of different sampling frames. Such techniques could feasibly be applied across the whole of England and Wales in the study of farm-based recreation, but this is not possible due to limitations of time, cost and complexity.

Emerson and MacFarlane (1995) asserted that an inadequate sampling frame is the first source of bias in any sampling and survey procedure. They went on to advocate informed choice in the initial selection of a sampling frame in order to avoid the progressive exaggeration of bias in a multistage methodology. Accordingly, this sub-section details the development of a stratified sampling methodology which seeks to minimise bias in the initial selection of study areas.

It is possible to identify two important interacting dimensions in the empirical study of farm-based recreation. The first dimension is the supply of farm-based recreation, which can be

seen as varying, in part, according to the agricultural characteristics of an area. This is because certain characteristics may predispose or constrain farms to operate recreation, or certain types of recreation. However, it must be remembered that agricultural characteristics alone are not the sole determinant of the supply of recreation. In this research, they are used to produce a classification of farm characteristics which provides an indication of farm-level factors influencing recreation supply. Few comparative surveys of this type have been conducted in England and Wales, and the incidence and types of farm-based recreation associated with particular agricultural characteristics have rarely been previously researched.

The second major dimension is the demand for recreation. Evans (1990) observed that farm-based accommodation is associated primarily with demand from tourism and, therefore, its occurrence is concentrated in certain areas. In contrast, the study of recreation is more complex as it is associated with both tourist and resident demand. This factor alone greatly complicates any study of recreation simultaneously structured around supply and demand characteristics. Therefore, a two part methodology for the selection of sampling areas is proposed. This will disaggregate supply and demand elements and will initially concentrate on an areal stratification according to farm characteristics, one of the most important dimensions in agricultural geography research. Subsequently, the demand for farm-based recreation will be used as an informative dimension within this agriculturally stratified framework.

The development of a stratified sampling frame for the selection of sampling areas has five important advantages which justify its use over other less rigorous approaches:

- I. a stratified framework ensures that the selection of sampling areas reflects a balance of major agricultural characteristics;
- II. it ensures a minimisation of bias in the initial selection of sampling areas;
- III. it provides a rigorous justification for selecting particular study areas;
- IV. it introduces a dimension for analysis in the form of the agricultural strata;
- V. the classification process provides a valuable starting point and background to the agricultural characteristics of the study areas prior to analysis.

(iii). THE DEVELOPMENT OF A STRATIFIED CLASSIFICATION OF AGRICULTURAL CHARACTERISTICS.

'Man has been engaged since very early times in the activity of seeking to assign objects to initially undefined classes in such a way that objects within a class are, in some sense, similar to one another. The exercise of comparing and naming is a fundamental step in the organisation of

information about one's environment, in the attempt to understand it more fully' (Gordon 1981:3).

This sub-section briefly introduces the use of classification in agricultural geography and subsequently develops a four stage classification methodology.

(a). Introduction.

In agricultural geography, classifications are often used to investigate spatial variations in types of farming (Clark 1992). Classifications have five advantages in this context. First, they satisfy a fundamental descriptive purpose, permitting the identification of any important relationships, patterns and characteristics emerging from extremely complex data systems (this aspect will provide the basis for study area selection). Describing patterns of similarity and difference by class labels may provide a very convenient summary of the data, although this has also been a criticism of classification techniques because information is lost (Clark 1992). Secondly, a classification scheme may represent a convenient and efficient method for organising a large set of data for effective retrieval of information. Anderson (1975:148) observed that '*classification, in itself, is a pre-theoretic stage in the scientific method, but it is a means of organizing and structuring data to gain insights that will lead to the development of theory*', or in this case, structure future research. Thirdly, classification can provide a justification to generalise findings to a larger population (within classes), enhancing the transferability of research. Again this can also be viewed as a significant weakness of classification and clearly should not be performed uncritically. Fourthly, classifications facilitate comparative analysis (between classes) based on the distinct characteristics of individual groups. Finally, classification can stimulate the production of hypotheses for further research. Classification is, therefore, crucial to an organised scientific enquiry. Contemporary studies in agricultural geography have increasingly employed classification as an intermediate stepping stone rather than as an end in itself, as demonstrated by Evans (1996), for example.

(b). Classification Methodology.

A wide range of different classification techniques are available (see Gordon 1981, Everitt 1993). Classification techniques essentially address the problem of dividing a given collection of objects, each of which is described by a set of variables, into a number of classes such that all the objects within one class are similar to each other. The number of classes, their composition and properties are all to be determined (Gordon 1981). Typically in geography, classifications are exploratory data analysis techniques which centre around generating rather than testing hypotheses, hence the widespread absence of significance

values which are more widely used in other disciplines, such as in statistics.

The first stage of the classification process involves the selection of a number of agricultural variables, which potentially may influence the supply of farm-based recreation, to generate a classification of farming character. Clearly, the initial choice of variables used to describe each individual classification unit constitutes an important frame of reference within which the classes are established. The selection of each variable should reflect its relevance for the purpose of the particular classification being undertaken. Gordon (1981) noted that this selection is a highly subjective process for which there are few guidelines. The question of how many variables are needed to describe each individual classificatory unit is also one for which there is no sound theoretical basis. The presence of additional variables on which clusters are not distinguished is likely to obscure the cluster structure and complicate the interpretation of the clustering. The selection of a relatively small number of variables here reflects the exploratory nature of the analysis, previous research and the conceptual framework of this study.

Fourteen variables from the Agricultural Census (MAFF 1994) are used to explore geographical variations in farm characteristics (Table 4.1). These variables are representative of three important agricultural dimensions: labour usage, farm type and farm size. They have all been identified as influencing the process of farm diversification (see Chapter 2). Existing patterns of labour usage are an important farm characteristic which may affect the process of diversification into recreational activities. Labour market and training needs in relation to farm diversification are highlighted in a report by ATB Landbase (1996). Farm type and farm size have been widely identified as important characteristics influencing recreational diversification. In the development of a stratified sampling frame, these factors are not the only suitable ones but they represent useful broad indicators for which data are readily available at the county level. In addition, work by Evans (1996) suggests that changes in the recording of agricultural census data, from individual parishes to parish groups, undermines the usefulness of more detailed intra-county exploration. Greater London is excluded from the analysis because of its small agricultural area and minimal number of holdings, but the other smaller 'metropolitan' counties are retained for the sake of completeness. The final data matrix therefore consists of 14 variables for each of 53 counties. It should also be noted that the counties used in the classification are those which existed prior to Local Authority reorganisation in 1997 which was subsequent to the completion of this stage of the research.

1.	Location Quotient for farmers partners and directors (per holding).
2.	Location Quotient for regular whole time workers (per holding).
3.	Location Quotient for regular part-time workers (per holding)
4.	Location Quotient for seasonal or casual workers (per holding)
5.	Location Quotient for dairying holdings
6.	Location Quotient for cattle and sheep holdings
7.	Location Quotient for cropping holdings
8.	Location Quotient for pig and poultry holdings
9.	Location Quotient for horticultural holdings
10.	Location Quotient for mixed and other types of holding
11.	Location Quotient for farms under 20ha
12.	Location Quotient for farms 20 to <100ha
13.	Location Quotient for farms 100 to <300ha
14.	Location Quotient for farms >300ha

Table 4.1 Agriculture in England and Wales: List of variables (MAFF 1994).

The Location Quotient (LQ) statistic is selected to illustrate the deviation of individual counties from the national average. Using the LQ, it is possible to determine the areal specialization of the farm characteristics under study in each county. The location quotient for each county is calculated as follows:

$$\frac{\text{Number of workers / holdings, for specified variable, in each individual county}}{\text{Total number of workers / holdings in the county}} \div \frac{\text{Total number of workers / holdings for specified variable in England and Wales}}{\text{Total number of workers / holdings in England and Wales}}$$

The statistic produced is a ratio measure which indicates the degree of specialization for a particular characteristic for each county. Values of greater than 1 indicate that a county has a relative concentration of a given variable. Values less than 1 indicate that a particular characteristic is not well represented in a particular county compared with the national average. The use of LQ values effectively eliminates any problems of distortion originating from variations in the size of counties.

Having selected the variables to include in the classification, it is necessary to specify an appropriate measure of proximity to produce a matrix which indicates the similarity or

dissimilarity of each pair of values. There are many distance measures which can be used to represent this proximity. According to Everitt (1993), the most commonly used of the various similarity indices is euclidean distance, a measure of dissimilarity. The selection of a particular measure is dependent largely on the type of data involved and particularly the type of variable. Euclidean distance is most appropriate with continuous variables which are all of a similar scale (such as the LQ values used in this study). However, it may be very unsatisfactory when used on raw data since its value is largely dependent upon the particular scales chosen for the variables. As a result variables are usually standardised before calculating euclidean distances. The second stage of classification, therefore, involves the standardisation of the data matrix. This is achieved by dividing each variable by the standard deviation calculated from the complete set of objects to be classified. Subsequently, in the third stage of analysis, euclidean distance is used to calculate the proximity matrix from the standardised data matrix.

The classification process itself is the fourth stage of analysis. A range of classification techniques are available, and of these cluster analysis techniques are probably the most widely used and are employed in this case. Initially, it is necessary to select an algorithm to perform the clustering. The most common are hierarchical methods which form clusters sequentially. Here, the most similar pair of objects are combined and then similarities for the new 'object' with the others are recomputed. This process continues until all the objects have been combined in a single group (Gordon 1981, Everitt 1993). Hierarchical classifications do not split the data into a fixed number of clusters at a single step. The classification runs from n clusters, each containing one individual, to a single cluster containing all individuals. Hierarchical approaches can be viewed as attempting to find the most efficient step, in some pre-defined sense, at each stage in the progressive sub-division of the data. The flexibility of these approaches means that a hierarchical approach has been selected, to produce a classification of the counties reflecting their major agricultural characteristics. The computer package Unistat 4.0™ was employed to perform the analysis. There may be a strong interaction between data type and clustering algorithm and computers permit a thorough exploration of these interactions (Everitt 1993). For this reason, three clustering algorithms identified by Everitt (1993) as being most widely applicable and useful (complete linkage, Ward's and group average) are employed and the similarity of the clustering outcomes compared. Similar outcomes are obtained from all three algorithms, reinforcing the stability of the clustering solution. The complete linkage algorithm is arbitrarily selected as the criterion for grouping. This algorithm seeks to classify the data according to the distance between groups based on the criterion of the greatest distance

between a pair of individuals, one from each group. The final stage concerns the evaluation of the clustering solutions achieved. It is necessary to consider two aspects of the interpretation of the clustering process; the number of clusters and the characteristics of these clusters.

(c). Number of Clusters.

All hierarchical techniques ultimately reduce the data to a single cluster containing all individuals. A decision is required to stop the process at a particular stage and to select a solution with an optimal number of clusters. In hierarchical clustering, the results can be displayed in a dendrogram which shows the sequence of grouping plotted against the similarity level of each combination. The conventional approach is to cut the dendrogram with a straight line at a chosen affinity level, where the loss of detail begins to increase rapidly, producing n groups. This approach involves a careful selection of the most appropriate number of groups for the data, but gives no consideration to subsequent combining or subdividing a subset of the selected groups.

As Anderson (1975) observed, such an approach fails to make effective use of all the information contained in the dendrogram. A dendrogram shows the differences in fusion levels for each combination and reveals the relative dissimilarities among the subsets of each group at any stage in the grouping. Natural breaks in dissimilarity between observations can be detected. Compactness and distinctness are two important characteristics of clustering solutions advocated by Anderson (1975). Compactness relates to the internal structure of a group in which all the members are close together. In contrast, distinctiveness is a feature of a group's external relations and requires the group to be a substantial distance from its neighbours. These two features are employed in the identification of the clustering solution.

(d). Identifying and Evaluating the Distinguishing Agricultural Characteristics of Each Stratum.

The dendrogram resulting from the classification is used to select a clustering solution which represents the most useful starting point in terms of the number and characteristics of the clusters. Summary statistics, absolute means and LQs are calculated for each of the clusters identified from the cluster analysis. In combination with the clustering dendrogram, these permit a further exploration of the distinctiveness and characteristics of each stratum and, if necessary, provide a basis for any alterations to the initial clustering solution. As

Anderson (1975) noted, it is frequently necessary to consider trade-offs between the number and properties of clusters in the selection of the final classification.

(e). *Observations.*

Although relatively straightforward, three important observations can be made about the methodology at this stage. They do not represent major problems as the primary objective is exploratory analysis. However, they recognise that:

- I. the representativeness and relative importance of the variables should be considered. The 'type of farming' data already represent a classification and this may mean that important differences are concealed. This could, in turn, reduce their effectiveness in the classification process;
- II. counties represent a convenient size of unit for the purposes of this exercise, yet their choice is largely dictated by the availability of data. The relatively large area to be classified and selection of a manageable number of study areas mean that broad categories with a high degree of generalisation are produced. The result is that meaningful differences in farming characteristics may be missed. The significance of scale has long been recognised by agricultural geographers and it is acknowledged that different sized investigative units can produce remarkably different results (Clark 1992);
- III. counties represent administrative units of convenience, and not agricultural 'regions', and as a result may conceal significant intra-regional variation in both agricultural characteristics and levels of demand. The sampling methodology within the selected counties must address this.

(iv). *CLUSTERING SOLUTION SELECTION, EVALUATION AND DISTINGUISHING CHARACTERISTICS OF STRATA.*

The selection of a clustering solution from the clustering procedure forms an integral part of the process of selecting county study areas and it is, therefore, appropriate to present the outcomes of this process here. Three stages are presented in this sub-section: the initial selection of a clustering solution, its evaluation and any subsequent alteration, and the distinguishing characteristics of the final clustering solution.

(a). *Selection of Clustering Solution.*

The results of the cluster analysis are presented in dendrogram form in Figure 4.1. As a starting point, the standard convention of imposing a straight line on the dendrogram, to produce compact and distinctive clusters is employed (Anderson 1975). In this case, a

solution consisting of seven clusters is selected, as this appears to be the most acceptable solution given these criteria. The individual county membership of these seven clusters is illustrated in Figure 4.1, alongside the dendrogram (the number assigned to each county corresponds to the numbers used in the dendrogram). A mapping of this clustering solution appears in Figure 4.2.

(b). Evaluation of Clustering Solution.

In order to evaluate the distinctiveness and usefulness of the clustering solution identified in Figure 4.1, summaries of the cluster characteristics are required. Table 4.2 presents summary statistics for each of the seven agricultural clusters. Two measures are presented; absolute and LQ figures. Absolute figures more accurately quantify differences and, therefore, permit a more effective evaluation between cluster characteristics. The LQ figures are presented to allow comparison back to the original data and account for relative concentrations which may not be obvious from the absolute figures. A further representation of these results is presented in Figure 4.3 which illustrates the relative concentration of the cluster characteristics. It should be remembered that, because these are cluster averages, relatively small concentrations may be significant.

As explained, initial examination of the clustering dendrogram (Figure 4.1) suggests a solution comprising seven clusters. Further detailed examination of the characteristics of the clusters in this solution (Table 4.2 and Figure 4.3) clearly shows that each of the seven clusters has distinct characteristics (it should be remembered when interpreting Figure 4.3 that minus variation is contained between 0 and -1). Although none of the clusters exhibit excellent distinctness and compactness, as advocated by Anderson (1975), they are sufficiently distinct and compact that any alteration of the solution, for the purposes of this sampling, appears unnecessary. The hierarchical structure of the dendrogram provides useful information about the relationships between the clusters and reveals that clusters 5, 6 and 7 are more closely related to each other than to the other clusters, as are clusters 2 and 3. However, all exhibit distinct combinations of agricultural characteristics.

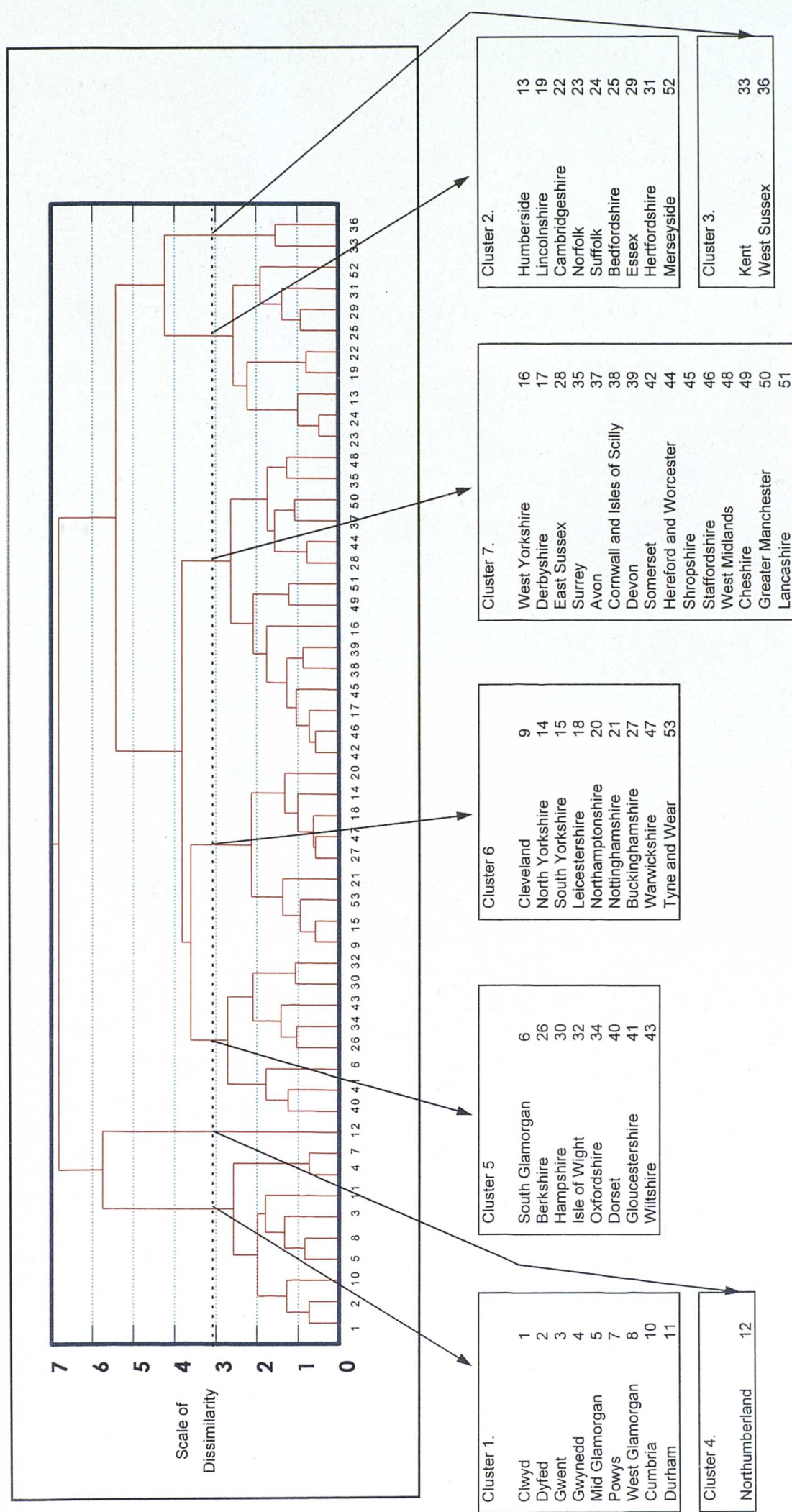


Figure 4.1 Cluster dendrogram and cluster membership.

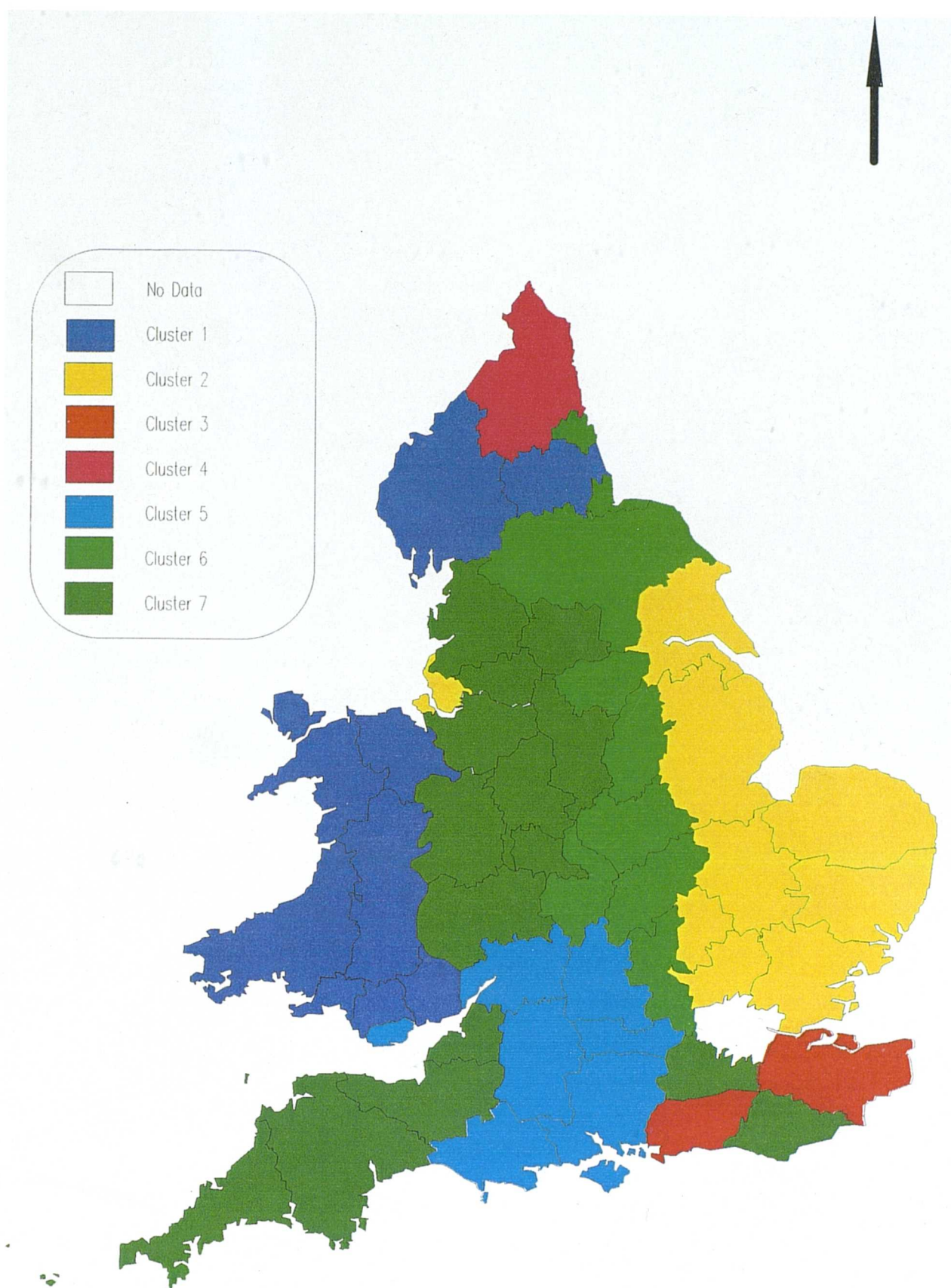


Figure 4.2 Classification of counties in England and Wales according to farm labour, farm type and farm size characteristics.

	Farmers, Partners and Directors		Regular Whole time workers		Regular Part-time workers		Seasonal or Casual workers	
Cluster	Holding ⁻¹	LQ	Holding ⁻¹	LQ	Holding ⁻¹	LQ	Holding ⁻¹	LQ
1	1.12	1.26	0.20	0.50	0.14	0.72	0.24	0.79
2	1.16	0.83	0.90	1.43	0.32	1.04	0.52	1.08
3	1.06	0.59	0.93	1.17	0.56	1.39	1.28	2.02
4	1.22	1.06	0.63	1.27	0.23	0.88	0.26	0.66
5	1.06	0.92	0.66	1.26	0.31	1.19	0.32	0.81
6	1.16	1.07	0.51	1.06	0.23	0.94	0.31	0.82
7	1.09	1.06	0.39	0.84	0.23	1.00	0.35	0.98

	Holdings Under 20ha		Holdings 20 to <100ha		Holdings 100 to <300ha		Holdings 300ha and over	
Cluster	%	LQ	%	LQ	%	LQ	%	LQ
1	39	0.90	47	1.17	12	0.90	2	0.68
2	43	1.00	33	0.81	18	1.34	6	2.14
3	53	1.22	31	0.77	13	0.93	3	1.24
4	20	0.46	30	0.74	36	2.68	14	5.12
5	44	1.00	36	0.89	15	1.18	5	1.92
6	37	0.85	41	1.03	19	1.36	3	1.17
7	48	1.10	42	1.04	9	0.69	1	0.34

	Holdings Dairying		Holdings Cattle and Sheep		Holdings Cropping		Holdings Pigs and Poultry		Holdings Horticulture		Holdings Mixed and other types	
Cluster	%	LQ	%	LQ	%	LQ	%	LQ	%	LQ	%	LQ
1	17	1.24	57	1.69	3	0.13	1	0.46	1	0.20	21	0.80
2	2	0.13	8	0.23	54	2.96	5	1.74	9	1.79	21	0.81
3	4	0.30	21	0.63	20	1.10	3	1.05	19	3.68	32	1.21
4	4	0.30	52	1.54	19	1.04	1	0.42	1	0.28	22	0.84
5	15	1.06	27	0.78	17	0.93	3	0.98	6	1.11	33	1.25
6	10	0.76	27	0.81	28	1.52	3	1.09	3	0.58	28	1.06
7	19	1.39	35	1.03	9	0.50	3	0.98	5	0.97	29	1.09

Table 4.2 Summary of agricultural statistics for clusters.

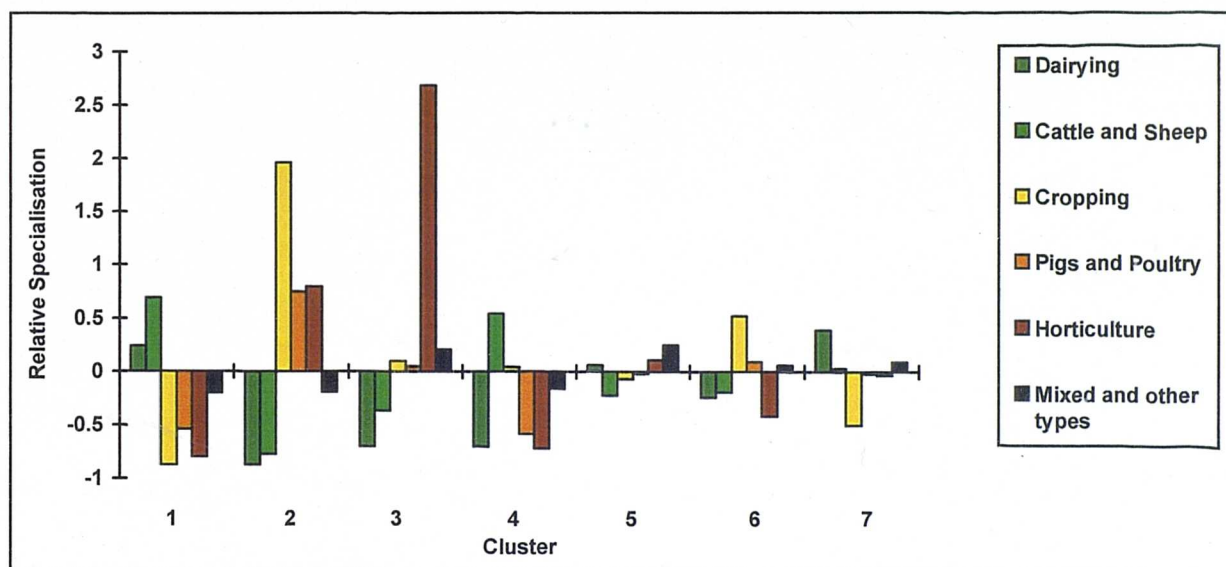
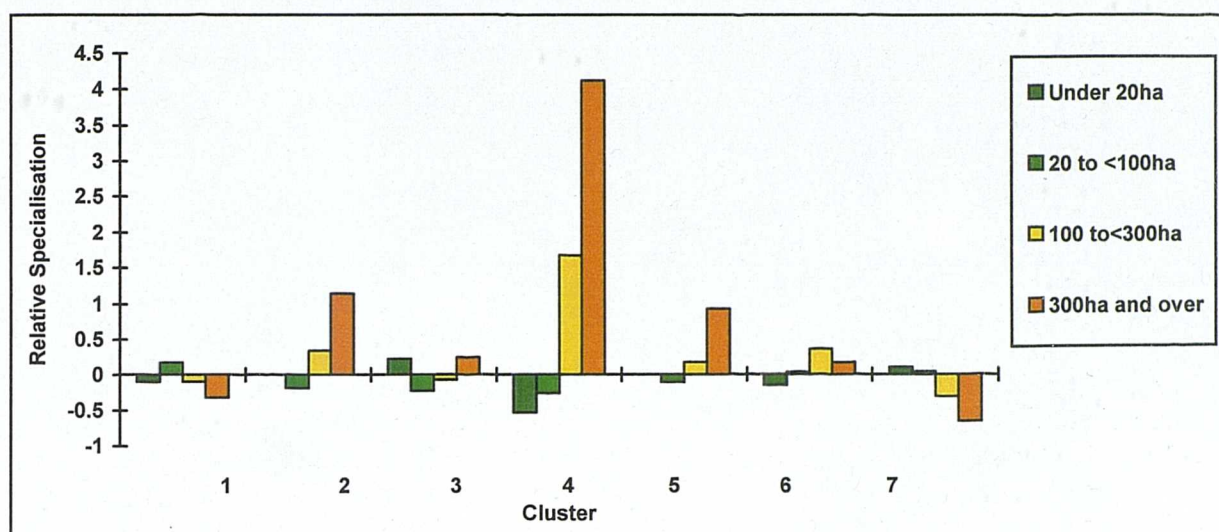
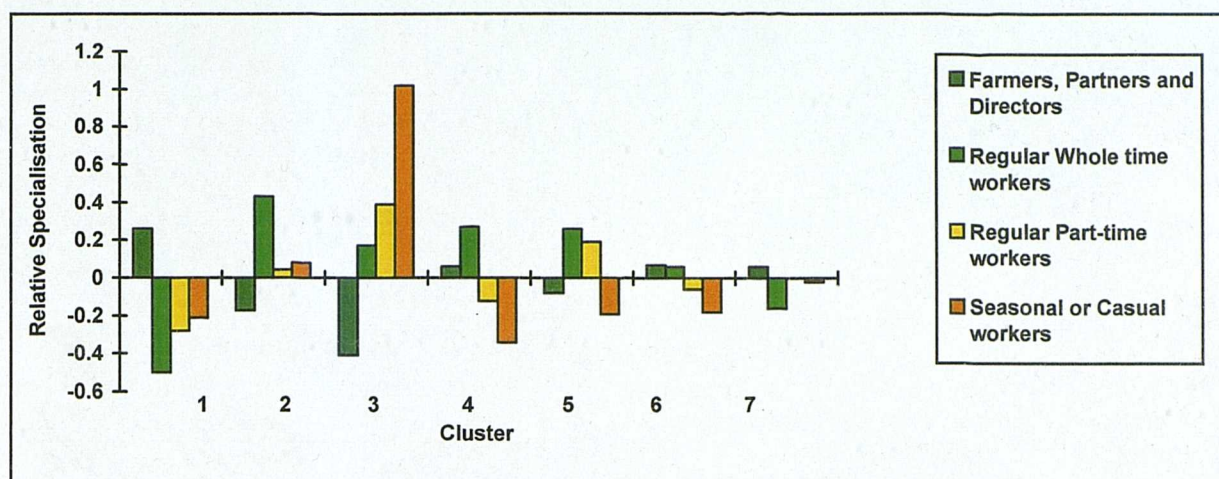


Figure 4.3 Relative specialization, high concentration above 0, low concentration below 0, according to agricultural characteristics of clusters (0 = LQ at 1).

(c). Key Agricultural Characteristics of Clusters.

It is useful to discuss and highlight the defining agricultural characteristics of the clusters, identified from Table 4.2 and Figure 4.3.

Cluster 1 - General Upland. Geographically, this cluster is concentrated in the west and north-west and contains the majority of the Welsh counties and the counties of Cumbria and Durham. Agriculturally, it is characterised by very low levels of regular, part-time and seasonal/casual labour and a high number of farmers, partners and directors. There is not a strong concentration of particular farm sizes, although larger farms (100 ha plus) show a below average concentration. Cattle and sheep are the predominant farm type, whereas other types are very poorly represented.

Cluster 2 - Arable East. In contrast to cluster 1, the counties in this cluster are concentrated in the east of the country. The cluster is dominated by cropping holdings, with very low levels of dairying and cattle and sheep. It also has the highest level of pigs and poultry with horticulture well represented. Larger holdings, especially those over 300 hectares, exhibit a strong concentration in this area. There are also high levels of regular full time workers and part-time workers.

Cluster 3 - Horticultural. Although comprised of only 2 counties, this cluster exhibits distinct characteristics. Horticulture is an extremely important component of it and mixed farms are also well represented. Farm size shows a distinct tendency towards smaller farms, especially those under 20 hectares. Extremely high regular whole time, part-time and seasonal/casual labour are also important characteristics of this cluster. Although most closely related to cluster 2 (See Figure 4.1), these characteristics indicate clear differences.

Cluster 4 - Upland Large Farm. This cluster contains only one county, that of Northumberland, in the North-East of England. It is characterised by an exceptionally high proportion of farms over 100 and 300 hectares in size. Cattle and sheep are the predominant farm types. This county also exhibits a high number of regular full-time workers and low levels of part-time and casual labour.

Clusters 5, 6 and 7 - Arable Eastern Margins, Dairying Western and Central Mixed. These three clusters are quite closely related and are discussed together as this enables the differences between them to be highlighted more easily. The three clusters together form a central block of counties sandwiched between the counties of cluster 2 to the east and

clusters 1 and 4 to the north and west. Southwards they extend into the South-East and South-West (See Figure 4.1). However, within this distribution a distinct pattern associated with the individual clusters is present. This is closely linked to their agricultural characteristics. Cluster 6 forms a band bordering the arable counties of cluster 2 and exhibits similar, if less pronounced, characteristics. A specialization in arable cropping and larger farm sizes is evident. In contrast, cluster 7 borders the western counties of cluster 1 and extends into the South-West. Here dairying and mixed farms are specialized and arable cropping is at a low level as are larger farm sizes. Cluster 5 forms a block of counties in the southern centre of England (plus S. Glamorgan in Wales) and is adjacent primarily to cluster 7 to the west and cluster 6 to the east. Again a distinct set of agricultural characteristics exist. Mixed farms, horticulture, farms over 300 hectares and regular and part-time workers are all concentrated above the national average in this area.

(d). Demand as an Informative Dimension in the Selection of County Study Areas from Agricultural Strata.

Having evaluated and identified a suitable agricultural stratification, it is possible to move on to the final stage in the selection of county study areas which employs demand as an informative dimension. The agricultural classification has provided 7 broad clusters but presented the problem of which counties to select for study within these groups. Clearly, in any selected county demand for farm-based recreation will exist from both tourists and the resident population. Such intra-county variations represent an important component of future research within the selected counties. However, to ensure that the initial selection of counties for the sampling process includes a range of levels and types of demand, it is necessary to evaluate inter-cluster variations in demand. This refines the selection of individual counties and ensures that a balance of levels and types of demand are sampled.

Edmond *et al* (1993) identify two distinct constituents of demand for farm-based diversification enterprises; tourist and non-tourist demand. It is hypothesized that high population levels in a region (non-tourist demand) and, equally, high levels of tourism in a region will both present greater opportunities for farm-based recreation. Two simple measures of demand are adopted. The first, population density (Office of Population and Censuses (OPCS) 1994), provides a crude indicator of non-tourist demand for farm-based recreation at a county level. The second, tourist demand is based on the farm-based accommodation work by Evans (1990). This represents one of the few available sources of county level tourism data (presented as county LQs). Tourism statistics are generally based around tourist regions comprising a number of counties and, whilst valid, it is felt that they

are not sufficiently detailed. In agreement, Edmond *et al* (1993) noted the limited availability of indicators on tourism opportunities in relation to modelling on-farm tourist enterprises. It is assumed that a high level of supply of farm-based accommodation in an area correlates with a high demand from tourists for accommodation. Before continuing, it is necessary to make four observations about the selected demand indicators and their use. In this case, where demand is being used as an informative dimension, within the rigorous agricultural stratification, these observations have relatively less significance:

- I. the farm-specific nature of the tourism data means that interactions between farm characteristics and accommodation provision may exist. Consequently, these data might not accurately reflect the true tourist demand of an area. The provision of accommodation is also unlikely to reflect day trip tourism;
- II. the tourism data may not give an accurate indication of the total provision in terms of capacity as they are based on farm units and not tourist enterprise size;
- III. the use of counties as sampling units disguises fringe effects whereby particular characteristics of adjacent counties may have a greater influence than those of the selected region. This is especially true in terms of levels of demand;
- IV. a similar observation relating to the concentration of demand within a county can be made. This may result in a whole county being classified on the basis of a highly concentrated pocket of demand.

To provide information to help select individual counties from the agricultural clusters, the two adopted measures of demand are sub-divided into high and low sub-groups based on their mean values. It is then possible to assign each county with a 'score' for each of the demand indicators. These are then used in conjunction with Table 4.3 to produce a general classification consisting of four broad categories of demand. For example, West Yorkshire has a Tourist Demand (LQ) value of 0.49 and a non-tourist demand (population sq Km⁻¹) of 1029, which results in a classification of high population low tourist demand.

		Tourist Demand (LQ)	
		0-1.00	1.01-2.00
Population Demand (Population Sq Km ⁻¹)	0-340	Low Population Low Tourist Demand	High Tourism Low Population Demand
	341+	High Population Low Tourism Demand	High Tourism High Population Demand

Table 4.3 Classification of demand categories.

It should be remembered that demand is included here as an informative dimension and its purpose is to ensure that a range of levels and types of demand are sampled within the agriculturally stratified sampling frame. The selection of county study areas then takes place pragmatically from each agricultural cluster according to four preset criteria:

- I. as being broadly representative of important agricultural characteristics of the cluster;
- II. where only one category of demand is predominant, one county is selected to indicate the typical category of demand in the cluster;
- III. where the cluster exhibits a balanced distribution of counties in more than one of the four broad categories of demand identified, one county typical of each category of demand is selected;
- IV. the selection of individual counties from within the categories of demand is undertaken with reference to the more precise figures. Outliers within the broader groups are avoided and, where necessary, proximity to Greater London and other significant fringe effects are considered as these are not taken into account in the county demand scores.

Again the outcomes of these processes represent an integral step in the selection of county study areas and are presented here. Figure 4.5 integrates the supply and demand dimensions. The counties are arranged in columns according to their agricultural cluster. Within each column (cluster) the counties are arranged according to their category of demand. This integration permits the informed selection of individual counties for sampling from each agricultural cluster. Cluster 4, comprised of just one county, is discarded at this stage. Nevertheless, it is the agricultural cluster with the most distinctive characteristics, explaining its classification as an individual cluster, and on this basis it should merit research attention. However, it represents less than 2% of the number of counties sampled and its key characteristic is large farm size. In other respects, it is closely related to cluster 1, (see Figure 4.1). This difference is not thought to be significant enough to justify more detailed attention, in contrast to the other small cluster, number 3, which although related to cluster 2, has a more distinct combination of characteristics.

The selection of counties for sampling from Figure 4.4 is based on the criteria which have already been put forward. However, in some cases further clarification is required. The selection of counties for sampling from cluster 1 is relatively straightforward. Two categories of demand predominate and Durham and Gwynedd are selected as examples of these. A similar pattern is evident in cluster 2, although the selection of Hertfordshire as a low tourism

high population example also noted its proximity to London, which is likely to result in an even greater level of demand. Cluster 3 presents a limited choice and Kent is selected to ensure that an area of very high tourism and high population demand is included in the sample. A single category of demand predominates in clusters 5 and 6, with Gloucestershire and Leicestershire selected as respective examples from these clusters. In the case of cluster 7, which contains the single largest number of counties, the choice is less clear cut; however, high population and low tourist demand is the dominant category and Cheshire is selected. Overall this provides a sample of 8 counties stratified according to six agricultural clusters with 2 counties classified as having low population and low tourism demand, 2 with high tourist demand and low population demand, 3 with high population and low tourist demand and 1 with a very high tourist and population demand. This reflects the overall distribution of categories of demand within the counties.

The method of selection employed ensures that the full range of levels of demand for farm-based recreation are sampled within the agricultural strata. An inevitable outcome of an approach structured by both agricultural and demand dimensions is that it identifies a large number of study areas. However, this ensures that an effective stratified sampling frame is produced. Unsurprisingly, it is the extremes of demand, both tourist and non-tourist, which have attracted research attention in the past; for example, work by Davies (1971, 1973) in the South-West concentrates on tourist demand. Work by Ilbery (1991) in the West-Midlands urban fringe concerns population demand and research by Bull and Wibberley (1976) in South East England took place in an area of very high aggregate demand. In contrast, a major focus of this work is to generate a relative picture of the incidence and distribution of farm-based recreation according to agricultural characteristics across the whole of England and Wales and this is reflected in the choice of study areas. Indeed, the wider significance of recreation has already been tentatively revealed by the work of Ilbery and Stiell (1991) who examined the uptake of the FDGS under which grants were available for limited types of recreational developments. Uptake of recreation grants was geographically widespread and not solely concentrated in areas of extreme demand.

	Cluster 1	Cluster 2	Cluster 3	Cluster 5	Cluster 6	Cluster 7
Low Tourism Low Population	Powys Dyfed Clwyd Gwent Durham	Lincolnshire Cambridgeshire Humberside Norfolk		Wiltshire	Northamptonshire Warwickshire	Hereford and Worcester Shropshire
Low Population High Tourism	Cumbria Gwynedd	Suffolk		Oxfordshire Gloucestershire Dorset Isle of Wight	North Yorkshire	Devon Somerset Cornwall
Low Tourism High Population	Mid Glamorgan	Bedfordshire Hertfordshire Merseyside Essex	West Sussex	South Glamorgan Berkshire Hampshire	South Yorkshire Cleveland Leicestershire Nottinghamshire Buckinghamshire Tyne and Wear	Lancashire West Yorkshire Greater Manchester Surrey Cheshire Staffordshire Avon West Midlands
High Tourism High Population	West Glamorgan		Kent			East Sussex Derbyshire

County Study Area Selection.

Low Tourism Low Population	CLUSTER 1 DURHAM	CLUSTER 2 HUMBERSIDE	CLUSTER 3	CLUSTER 5	CLUSTER 6	CLUSTER 7
Low Population High Tourism	GWYNEDD			GLoucestershire		
Low Tourism High Population		HERTFORDSHIRE			LEICESTERSHIRE	CHESHIRE
High Tourism High Population			KENT			

Figure 4.4. The integration of supply (agricultural) and demand (tourist and population) dimensions and county selection.

4.2. The Collection of Primary Data Phase 1. A Postal Questionnaire.

Having established that few suitable secondary data exist, the only remaining option to obtain information about farm-based recreation is the direct collection of primary data. This second methodological section, therefore, concentrates on aspects of questionnaire design, sampling, response rates and methods of analysing the primary data collected from the selected sample counties.

(i). QUESTIONNAIRE DESIGN.

The collection of primary data clearly dictates the need for some kind of survey amongst farmers. An extensive postal questionnaire survey methodology was selected for two reasons. First, the stratified sampling approach has identified that six sampling strata (eight county sampling areas), each containing a relatively large number of farms, are required to ensure that a wide range of farm and non-farm factors are captured in the research. Secondly, the potential diversity of types of recreational provision illustrated in previous chapters means that there is a need for an extensive survey to generate workable numbers for analysis.

Careful questionnaire design is vital as the resultant information will only be as good as the methods and techniques employed to gather the data. Consequently, the questionnaire on farm-based recreation has been aided by ideas generated in Chapters 2 and 3, in conjunction with well-established guidelines for social surveys (Moser and Kalton 1981, Fowler 1993, Neuman 1994). An assessment of numerous questionnaires from previous postal farm business surveys has also provided valuable guidance (Bull and Wibberley 1976, Griffiths 1987, Ilbery *et al* 1996).

This sub-section develops the following logical sequence of issues associated with questionnaire design: objectives, type and format, content, length and structure, wording and potential errors.

(a). Objectives.

The objectives of the survey must be clear to justify the method of data collection and maximise the usefulness of the information obtained. In this case, they are to collect data on the extent and types of farm-based recreation. The content of the questionnaire is closely

linked and structured by the conceptual framework discussed in Chapter 3. In this case basic information about recreational activities and their diversity, especially the financial dynamic, and the characteristics of farm businesses with recreation.

(b). Questionnaire Type and Format.

As the survey will be distributed to many farmers without recreational activities, a questionnaire based primarily around quantitative closed questions is developed. Although a low level of understanding is obtained from postal questionnaires compared with contact methods, this approach is ideally suited to gathering the basic information which is lacking in relation to recreation and which is necessary before more detailed investigation can be undertaken. Closed questions are quick and simple to answer and, in addition, the results are easy to collate. The use of structured response categories is employed throughout as a guide to what is wanted and as a means of clarifying the questions. The format of each question consists of a range of numbered options that require the appropriate number to be circled. This also further simplifies the coding of data which is an important practical consideration for subsequent analysis.

(c). Questionnaire Length, Structure and Content.

It is assumed that as the questionnaire length increases so too does the likelihood of obtaining a low response, although there is little firm evidence to support this assumption (Moser and Kalton 1981).

The questionnaire is primarily concerned with gathering data relating to:

- I. the incidence of different types and categories of provision of farm-based recreational activities;
- II. more detailed characteristics relating to the initiation, operation and evolution of these recreational activities;
- III. the reasons for adopting or not adopting recreational activities.

The questionnaire is structured so that those without recreational activities complete the first three pages and in so doing go through the lists of activities. This ensures that any preconceptions which individuals might have about what constitutes a recreational activity are addressed. The different types of recreational activity are also mentioned in the accompanying covering letter. The final questionnaire consists of 19 questions ordered into 4 sections, each conveniently filling one A4 side of the four-sided questionnaire.

The first section (questions 1-5) consists of farm profile information, required for analytical purposes, relating to farm size, recent changes in farm size, important agricultural enterprises, land tenure and recent changes in occupancy. Each questionnaire is also coded according to its destination sampling area. This provides an indication of the broad geographical location of the respondents. More detailed locational information is obtained by completing farm postcode area, district and sector on each questionnaire. Although a laborious process, it avoids adding additional questions and any inaccuracies which might occur by asking farmers to provide their own postcodes, distances from towns, cities, or their location in National Parks, AONBs and Heritage Coasts. The fact that this level of postcode information could not be used to identify individual farms is emphasized.

The second section consists of two questions relating to types of recreational enterprise operating on the farm. Question 6 concerns permanent recreational activities. These are subdivided into four of the five types devised in Chapter 1: those that are open to the general public without booking; those available to the general public by arrangement only; those available only to members of private groups, syndicates or clubs; and those for personal use by family and friends. The response categories are based on lists compiled from the literature review and a large selection of diverse advertising materials. This ensures that the majority of important types of recreation are represented. Space is also provided for other activities not covered by the lists. Question 7 is about temporary recreational events, the fifth category in the functional classification. In this case, a 12 month timespan is selected to cover those activities occurring on an annual or more frequent basis. Again, the response categories are based on a range of advertising leaflets and ideas gleaned from the literature review.

The third section is aimed directly at farmers without recreation. As, on the basis of previous research, the majority of those contacted are unlikely to have recreation, it is important to position this section ahead of the more-detailed recreation questions and to make clear to those without recreation the number of questions they need to answer. The first questions in this section are aimed at identifying those farms which had operated recreation in the past and farms planning or developing recreation. In either case, a contact number is sought to allow further exploration of these cases. The final question of this section, and the last one for those without any recreational activities, concerns the reasons why recreation has not been developed on the farm. A list of reasons, compiled from previous research on farm-based recreation and diversification is presented. The order of the reasons in the list is determined randomly.

The fourth and final section is specifically for those with recreational activities on the farm. Here the questions seek more detailed information about these activities. Questions in this section concern the starting date of recreation, the integration of recreation with accommodation and retailing on the farm, the development of additional recreational activities, the expansion, contraction or modification of existing activities, and charging and the financial importance of recreation to the continued operation of the farm business. Finally, the important factors which influenced the decision to set up recreation, including motives, are investigated. To fulfil the objective of identifying farms for further research, a question relating to the opportunity to participate in future research is included.

(d). *Wording.*

The wording of the questions is kept as simple as possible and complex terminology is avoided. For example, farm size is structured in acres instead of hectares as it is felt that this would be better received and understood, especially by older farmers. Questions such as those relating to the farmer's age, family structure and capital investment/returns are not included because of the personal nature and complexity of these data, possible ambiguity in the understanding of the terms, their dependence on which individual completes the questionnaire (a typical problem of postal questionnaires) and the difficulty of analysing the information. To avoid these problems, the questionnaire is worded in such a way as to allow different members of the household to complete it, and not just the person who initially received the questionnaire. This fact is emphasized in the covering letter.

(e). *Potential Errors.*

Postal questionnaires should not be constructed uncritically. Closed questions can produce erroneous results. Particularly problematical is the possibility of leading respondents by the suggestion of ideas. Alternatively, a random response from a list of feasible answers may be obtained. As far as possible, the questionnaire has been designed to take into account these observations and minimise their effects. Many options are put forward to ease problems of analysing 'other' responses and, where necessary, to present a comprehensive picture of the nature of the question. It should be pointed out, however, that checklists do not entirely restrict answers as opportunities are provided throughout the questionnaire for farmers to supply details not covered by the checklists. It is felt that the value of an increased response rate outweighs any differences which might exist in the response according to who completes the questionnaire. Any suitable member of the household is encouraged to complete the questionnaire as an active mechanism to improve the response

rate. However, this does mean that it is not known who has completed the questionnaire. The final version of the questionnaire can be seen in the Appendices.

It must be realised that this represents the result of numerous draftings and various discussions with individuals experienced in either dealing with farmers or questionnaire design. The consideration of these factors and a qualitative pilot with four farmers known personally to the researcher replaced the traditional pilot survey as a method of evaluating the questionnaire. This represented a valuable time-saving device compared to a traditional pilot survey.

(ii). SAMPLING METHODOLOGY WITHIN SELECTED STUDY AREAS.

Errington (1985) identified three potential sources of bias in the sampling and survey procedure:

- I. the sampling frame;
- II. the sampling procedure;
- III. the rate of response.

These will be considered in turn and provide the basic structure for the following parts.

(a). Selecting the Sampling Frame.

The sampling frame is employed to target individuals for the survey. Two distinct types of farm sampling frame can be identified. First, there are spatially-based sampling frames, such as the cluster and grid intersect frames proposed by Clark and Gordon (1980); and secondly, there are non-spatial frames such as the Yellow Pages, evaluated by Errington (1985). Spatial sampling frames are poorly suited to sampling by postal questionnaire because it is time consuming and difficult to generate precise addresses from these techniques. Hence, this part concentrates on the various non-spatial sampling frames which are available.

The primary non-spatial sampling frames available for farm surveys are MAFF holding lists, the Yellow Pages, British Telecommunications (BT) Business Database and NFU membership lists. MAFF holding lists are comprehensive, flexible, and widely considered to be the ideal sampling frame for farm surveys (Emerson and MacFarlane 1995). However, they are difficult to obtain unless the research is commissioned or sponsored by MAFF and may also be associated with restrictions on questionnaire design, content and subsequent

data use. Yellow Pages directories may include duplicate listings because of multiple phone lines, do not include those businesses without phones, quickly become out of date, may exclude particular types which do not conform to the categories of the directory, and may split farmers between a number of different categories (for example, horticultural growers). The category of 'farmers' may also include associated businesses such as grain stores, machinery dealers, farm building manufacturers and farm shops. In addition, there is potential for multiple addresses relating to one farm from estate cottages, machinery workshops and separate farm offices. Yellow Pages has also been shown to exhibit a bias towards larger farm businesses, tending to under-record small and part-time farmer businesses (Clark and Gordon 1980, Errington 1985). Despite these problems, Errington (1985) assessed the representativeness of the Yellow Pages against MAFF holding lists for Oxfordshire and concluded 85% accuracy. Although this might vary regionally, it appears that Yellow Pages represents a suitable sampling frame for farm surveys.

The BT Business Database is essentially an electronic Yellow Pages. However, it has two important advantages over the printed version of this source (Ilbery *et al* 1996):

- I. it is updated every month, in contrast to the Yellow Pages which is out of date by the time it is published;
- II. it is far more flexible in terms of both search options and output formats. Searches can be carried out by county, Yellow Pages areas, postcode areas, by business types, for example farmers (code 3EC0011), and within a given radius of a point. The wide range of output options such as 3½" disks and self-adhesive labels represents a significant time-saving compared with the Yellow Pages.

The final sampling frame to be considered are NFU membership lists. These are not problem-free either, with the main problem being access to them. If this is achieved a number of problems still exist. Many farmers are not members, in other cases the membership of more than one person from certain farms will increase their probability of being selected and the lists are also biased against small 'hobby' farms and part-time holdings.

Given this limited choice of sampling frames, the BT Database is selected. It is still prone to some of the problems observed in relation to the Yellow Pages, but it represents the most accurate and flexible approach available.

(b). Sampling Procedure.

Complete coverage of all holdings identified from the sampling frame is impractical. Resources were available to cover a sample of about 4000, sufficient to guarantee a reasonable sample size. Having selected a suitable sampling frame for the population and identified the sample size, it is necessary to develop a sampling procedure within these parameters.

The flexibility of the BT Database means that random sampling of farmers within the selected county study areas is possible. This method ensures that intra-county variation in agricultural characteristics, an important characteristic of the initial stratified sample, is taken into account. Instead of sampling a pre-defined proportion of farm addresses, a fixed sample of 500 farms in each of the 8 study areas is selected (however, only 469 database entries were available for Hertfordshire). The rationale behind this is threefold:

- I. the county study areas are already stratified according to agricultural characteristics so the need to sample a set proportion of holdings is diminished;
- II. a fixed sampling number within the predetermined total sample size removes the need for complex calculations determining sampling fractions within this total;
- III. it significantly simplifies administrative aspects, the calculation of response rates and other analysis associated with a questionnaire survey of this size.

The BT Database is employed to provide the addresses for 3969 farmers and these are purchased on two sets of self-adhesive labels. The questionnaires were sent out in mid-October, 1996. The timing of this is very important, and selected so as not to coincide with major farming operations (especially harvest and post-harvest cultivations) or the peak tourist season. A short covering letter, printed on official College stationery, detailing the nature of the project and its sponsorship is enclosed with the questionnaire (this is attached to the questionnaire to ensure that the two do not become separated) and a business reply envelope. These have both been identified as important factors promoting increased response rates (Neuman 1994). There is very limited evidence to suggest that ordinary stamped addressed envelopes are more effective in obtaining a higher response (Moser and Kalton 1981, Neuman 1994). The significant cost saving associated with using the business reply service outweighed this consideration. In addition, the first letter is signed by hand; whilst this is a time-consuming process, it is felt that this might give a more personal feel to the questionnaire in contrast to a mass copied signature. Attention to small details such as these is thought to be worthwhile (Fowler 1993).

(c). Response Rates and Evaluation of Bias in Agricultural Characteristics of the Respondents.

The problem of securing adequate response rates is the most vital consideration when employing postal questionnaires (Moser and Kalton 1981, Fowler 1993). This issue is addressed directly in the design of the questionnaire and the follow-up strategy. The whole process of questionnaire and covering letter design is orientated towards creating a quick, straightforward questionnaire which could be filled in by any one of several people in the household. The thinking behind this is that it would promote an improved response rate. It also seems likely in many cases that the questionnaire would be completed by a farm wife given the increasing administrative role that they often perform in farm businesses (Gasson and Winter 1992). The design process paid careful attention to the successful farm questionnaires of Bull and Wibberley (1976) which achieved a response rate of 65% and Ilbery *et al* (1996) who achieved a response of 42%. The latter is probably more typical of the level of response which might be expected from farmers given the exponential growth of junk mail targeted at businesses, coupled with an increasing burden of official paperwork.

Follow-up strategies have been identified as a vital way of significantly boosting response rates. A reminder of the purpose of the survey was sent out 21 days after the original posting (See Appendices). This emphasized the point that even if farmers felt that the survey was inapplicable to them they should still reply. An additional questionnaire and reply envelope were included for this purpose. This approach is based on the results of a survey by Harper Adams Agricultural College (1977) which documented the pattern of response to a single postal questionnaire of farmers. Over 50% of the respondents replied within 10 days and they continued to receive a significant number of responses during the first 21 days. On this basis, 21 days should permit the initial response to be maximised before the follow-up is employed. Anonymity, a problematic issue associated with follow-up letters, is maintained by using a blanket approach. However, this approach does not permit individual respondents to be identified and so this creates the additional problem of removing duplicate returns from the database before any analysis takes place.

It would be extremely unusual to achieve a 100 per cent response rate in any survey and especially with a postal questionnaire. The factor of non-response constitutes a major problem. As Emerson and MacFarlane (1995) observed, there will usually be a bias in the response with certain characteristics being over or under-represented. It has been asserted that the problem of non-response as a source of bias far outweighs the potential bias on most accepted sampling frames (Errington 1985). It is probable, in this case, that there

would be a greater proportion of farmers with, rather than without, recreational activities amongst the respondents than amongst the non-respondents.

Clearly, the safest way to deal with non-response is to try to reduce it to the lowest level possible. Nevertheless, a number of other steps have been taken to estimate and reduce the effect of bias. As a result of the sampling frame and anonymity considerations, it is not possible to confirm any bias in the non-respondents using telephone calls, a method recommended by several authorities (Moser and Kalton 1981, Neuman 1994). However, while a follow-up letter maximises response it also gives a useful indication of non-response. It has been decided to use this information to adjust the sample bias, for each cluster, based on the idea that the behaviour of the later respondents (due to the reminder letter) is more representative of the non-response population than is that of the initial respondents (Bull and Wibberley 1976). This mechanism obviously necessitates that a record is kept of the replies that are received in response to the reminder letter. The calculations required are illustrated in Figure 4.5.

Proportion of recreation amongst initial response $\frac{X}{\text{Total initial response}}$	= Amount of recreation amongst initial respondents (1)
Proportion of recreation amongst follow-up respondents $\frac{X}{\text{Total response to follow-up}}$	= Amount of recreation amongst follow-up respondents (2)
Proportion of recreation amongst follow-up respondents $\frac{X}{\text{Total number of non-respondents}}$	= Amount of recreation amongst non-respondents (3)
Estimate of total proportion of recreation, taking account of non-respondents	= (1+2+3) ÷ Total sample size.

Figure 4.5. Illustration of non-response calculation.

Of the 3969 questionnaires originally sent out, 1289 were returned, giving an initial response rate of 32.5%. The follow-up, 3 weeks later, produced a further 1022 replies (25.7%). However, this included 74 duplicate replies. The majority of these clearly stated that they had already returned a questionnaire and a comprehensive search of the database identified the remainder. This gives an adjusted response to the follow-up of 948 replies or, 23.2%, and an overall response of 2237 which equates to a very respectable return of 56.4%. Although this is by no means an exceptional response, it is certainly extremely satisfactory

when bearing in mind the low rates that can result from postal questionnaires and the rates achieved by other contemporary farm surveys.

The simple design of the questionnaire, its subject material, associated personal interest on the part of many farmers and its post-graduate rather than official nature all appear to have contributed, in combination, to this level of response. This is highlighted by the following comment;

"please note that our company policy is such that it does not normally answer questionnaires and we would expect to hear nothing further from you. In this case I have made an exception and filled in much of that requested" (Farm 1786).

However, of the total response of 2237 questionnaires, 138 could not be used for analysis. The main reasons were that the respondents were retired (34), the responses were received after the cut-off date (27) and the address was unknown (24). Eighteen questionnaires were returned blank, 16 were 'no-longer in farming' and 9 stated that they did not fill in surveys of any kind or commented about the large number of official forms which they already had to complete. The remainder included farm houses which were no-longer connected to farms, farms which had been amalgamated and a farm shop (see Table 4.4). The net total of usable questionnaires was therefore 2099.

UNUSABLE QUESTIONNAIRES - Reasons relate to those identified by respondents.	TOTAL
Retired	34
Received After Cut-off Date	27
Address Unknown	24
Blank	18
No-Longer in Farming	16
No surveys/Too many forms	9
Deceased	3
Amalgamated	3
Private Homes	2
Welsh	1
Farm Shop	1
TOTAL	138

Table 4.4 Breakdown of unusable questionnaires.

In addition to the unusable questionnaires, a further 26 responses came from holdings which had no agricultural production. Rather than eliminate these from the database it was decided to retain them. They are all recorded in the sampling frame (BT Database) under the heading 'farmers' and, therefore, it is possible that they might represent an opportunity to explore the role of recreation in disengagement and exit from farming.

This overall summary disguises significant inter-county variations in response rates. A more detailed breakdown of these is presented in Table 4.5. The initial response rates varied from 25.4% in Cheshire to 40% in Hertfordshire. These variations complicate a direct comparison of the response to the follow-up. However, by examining this response as a percentage of the non-respondents from the initial mailing, it is possible to identify a more useful indication of the response. Furthermore, expressed in this way, the overall response to the follow-up (30.2%) is very similar to that achieved by the initial mailing (32.5%). However, the response to the follow-up does not appear to exhibit a similar geographical pattern to the initial response.

The total response also exhibits significant variations from 49%, 53% and 53% in Cheshire, Leicestershire and Gwynedd respectively to 60% and 62% in Hertfordshire and Gloucestershire. Overall, it is possible that these differences may be connected to differences in the incidence of recreation with areas of high incidence perhaps having higher levels of response. More specifically, it is possible to speculate that the lower levels of response in Cheshire might correspond to the predominance of intensive dairying in this area, while in Gwynedd a Welsh nationalist and speaking element might be responsible. Indeed, one questionnaire returned from this county expressed the view "*I am Welsh*" accompanied by "*cymru am byth*" which apparently means "*Wales forever*". The higher levels of response in Gloucestershire might be associated with an element of local affinity to a college located in the adjacent county of Worcestershire. In contrast, the similarly high response from Hertfordshire might reflect the educational backgrounds of farmers in this county, a higher level of exposure to farm research or perhaps more farm secretaries. Clearly, it is impossible to attribute directly the variations in response rates to any of these factors. The pattern of response can be seen in Figure 4.6. The majority of responses (93%) had been received within 40 days of the initial mailing (18 days after the follow-up). It is notable, however, that responses continued to trickle in up to 168 days (over 24 weeks) after the initial mailing, although for practical purposes a cut-off point of 80 days was adopted.

CLUSTER	COUNTY	NUMBER OF FARMS	INITIAL RESPONSE		RESPONSE TO FOLLOW-UP			TOTAL RESPONSE		UNUSABLE RESPONSES	TOTAL USABLE RESPONSE
			TOTAL	%	TOTAL	%	% NON-RESPONDENTS	TOTAL	%		
1	Gwynedd	500	135	27.0	132	26.4	35.3	267	53.4	17	250
1	Durham	500	149	29.8	134	26.8	37.3	283	56.6	14	269
	TOTAL	1000	284	28.4	266	26.6	36.0	550	56.7	31	519
2	Hertfordshire	469	188	40.0	97	20.6	33.0	285	60.7	16	269
2	Humberside	500	162	32.4	121	24.2	34.6	283	56.4	15	268
	TOTAL	969	350	36.3	218	22.4	34.0	568	58.3	31	537
3	Kent	500	186	37.2	106	21.2	32.4	292	58.4	18	274
5	Gloucestershire	500	170	34.0	141	28.2	41.5	311	62.2	20	291
6	Leicestershire	500	172	34.4	94	18.8	27.7	266	53.2	22	244
7	Cheshire	500	127	25.4	123	24.6	32.0	250	50.0	16	234
TOTALS		3969	1289	32.5%	948	23.8%	30.2%	2237	56.4%	138	2099

Table 4.5 Summary of response rates.

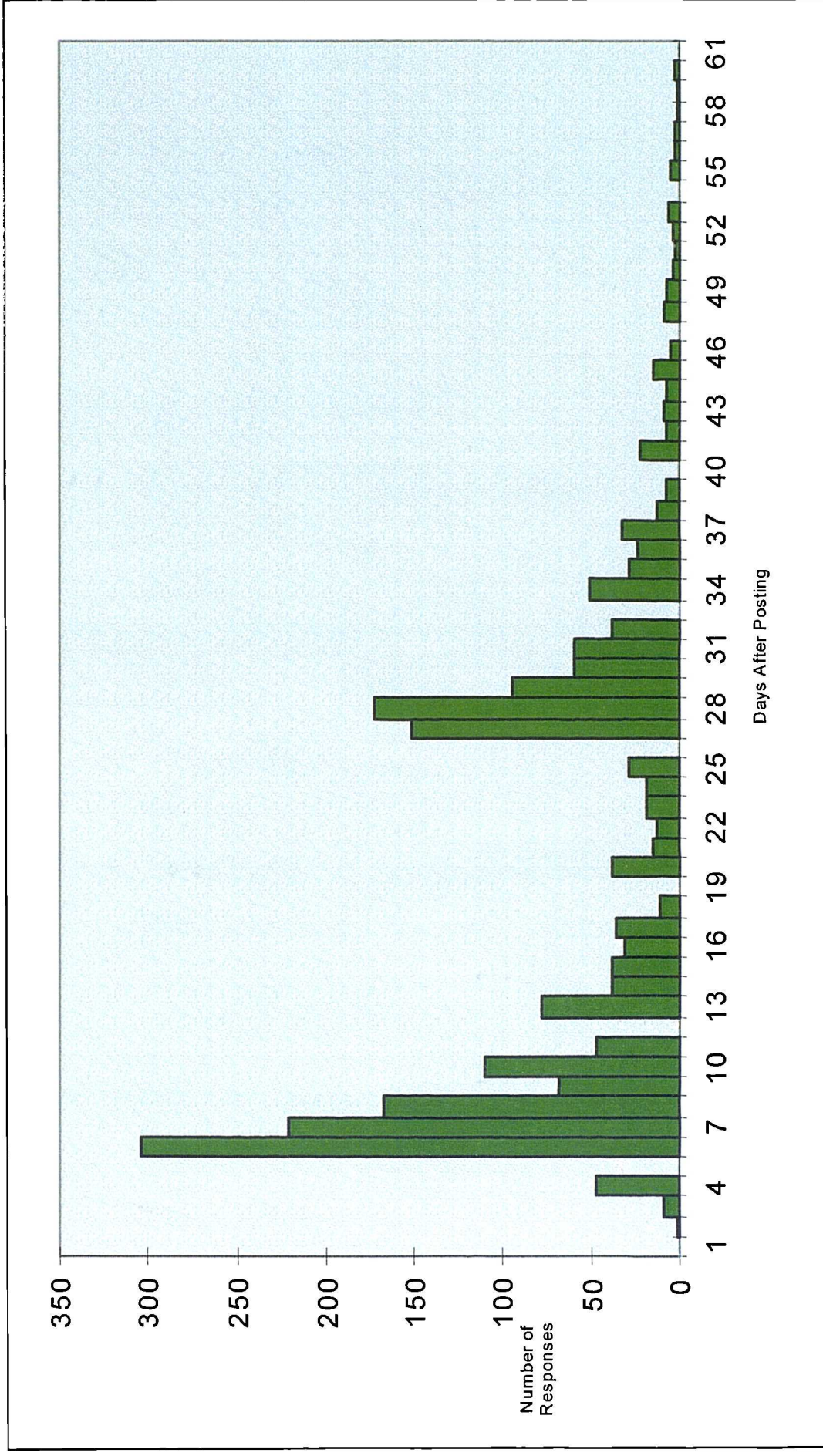


Figure 4.6. Pattern of response. (Follow-up posted on day 21).

It is now appropriate to move on and evaluate the representativeness of the sample in terms of the characteristics of farm size and farm type. In this case, the areal sampling frame, based on cluster analysis of agricultural characteristics, provides the profile data relating to farm size and farm type from which to assess the sample.

The results in relation to farm size are presented in Table 4.6. Immediately, it is clear that the distribution of small farms (up to 20 ha) among the respondents is significantly lower than predicted from the areal sampling frame. A commensurate over-representation of farms over 20 ha, and especially those over 100 ha, is also evident. There are three possible explanations for this difference. Firstly, the BT Database sampling frame is likely to under-represent these smaller holdings, based as it is on the Yellow Pages which has been shown to be biased towards larger farm businesses (Clark and Gordon 1980, Errington 1985). Secondly, as Ilbery *et al* (1996) observed, off-farm business diversification is associated with smaller farms. This may mean that farmers on these holdings have less time to fill in questionnaires. Thirdly, it may be the case that the incidence of recreational activities on these smaller holdings is lower and, therefore, the associated response has been lower. More information in relation to this issue should emerge later in the analysis.

CLUSTER	COUNTIES	% OF FARMS UP TO 20 HECTARES		% OF FARMS 20 TO 99 HECTARES		% OF FARMS 100 TO 299 HECTARES		% OF FARMS 300 HECTARES AND OVER	
		O	E	O	E	O	E	O	E
1	Gwynedd Durham	5	39	53	47	33	12	9	2
2	Hertfordshire Humberside	5	43	27	33	47	18	21	6
3	Kent	7	53	39	31	31	13	23	3
5	Gloucestershire	9	44	47	36	31	15	13	5
6	Leicestershire	8	37	46	41	37	19	11	3
7	Cheshire	15	48	70	42	14	9	1	1

Table 4.6 Observed (O) and Expected (E) distribution of farm size in the sample.

The evaluation of farm type of the responding farms against the expected distribution is not as straight forward as that presented for farm size. Unlike the sampling frame, which is based on a classification system according to the predominant farm type, the questionnaire data relate to the main agricultural enterprises on each farm (see Table 4.7). Responding farms expressed an average of 1.8 main enterprise types. Although a precise comparison is not possible, a more subjective one reveals that, in terms of the key farm type characteristics

identified from the sampling frame, the sample is broadly representative. For example, responding farms in cluster 1 are dominated by sheep and beef enterprises and the highest level of horticulture is found in cluster 3.

CLUSTER	COUNTIES	% FARMS WITH ENTERPRISES BY TYPE					
		ARABLE	SHEEP	BEEF	DAIRY	HORTICULTURE	PIGS / POULTRY
1	Gwynedd Durham	29	67	66	22	1	4
2	Humberside Hertfordshire	90	13	27	10	2	18
3	Kent	67	30	21	9	34	4
5	Gloucestershire	55	32	48	40	4	6
6	Leicestershire	56	37	47	31	1	5
7	Cheshire	31	18	24	59	2	8
AVERAGE		59%	36%	42%	26%	6%	9%

Table 4.7 Distribution of agricultural enterprises by type in the sample.

(iii). ANALYSIS OF POSTAL QUESTIONNAIRE DATA.

The analysis of farm-based recreation from the postal questionnaire primarily employs basic percentages to produce a descriptive picture of differences in the many sampled variables associated with farm-based recreation. The chi-square statistic is also employed to support these analyses. Where this statistic is presented, the following notation is used:

χ^2_6 where the lower figure (6 in this example) represents the degrees of freedom used.

(0.05) represents the level of significance.

(NS) represents not-significant.

The analysis uses Microsoft Excel as a suitable database. The database consists of 37 variables. Each of the responding holdings receives one entry into the database (comprising the 37 variables). This enables detailed cross-tabulations of each of the variables. A brief description of each of these variables is presented in Table 4.8. The format of the questionnaire means that the data are already in coded form, although extra 'sub-codes' are developed for several variables to cater for the responses to the 'other' categories. Errors in coding are minimised by cross-checking against the total calculated responses for each category. Questionnaires are also coded according to postcode, sampling strata and response tranche. The data are then summarised into percentage results.

	VARIABLE NAME	DESCRIPTION
1.	Area	Sampling Area.
2.	Cluster	Sampling Cluster.
3.	Response 1	Response Day.
4.	Response 2	Response to follow-up.
5.	Pcode 1	Postcode Area.
6.	Pcode 2	Postcode District.
7.	Pcode 3	Postcode Sector.
8.	Size	Farm Size.
9.	Change	Change in size.
10.	Type	Farm Type
11.	Tenure	Farm Tenure.
12.	Time	Change in tenure.
13.	Recn Y/N	Recreation yes/no
14.	Recn 1	Recreation Category 1 yes/no
15.	Recn 2	Recreation Category 2 yes/no
16.	Recn 3	Recreation Category 3 yes/no
17.	Recn 4	Recreation Category 4 yes/no
18.	Recn 5	Recreation Category 5 yes/no
19.	Recn Type 1	Recreation 1 individual types.
20.	Recn Type 2	Recreation 2 individual types.
21.	Recn Type 3	Recreation 3 individual types.
22.	Recn Type 4	Recreation 4 individual types.
23.	Recn Type 5	Recreation 5 individual types.
24.	Past	Has any past recreation occurred on the farm yes/no/specify
25.	Future	Are any recreational activities planned for the farm in the future yes/no/specify
26.	Not	Reasons for not developing recreation
27.	Date	Date when the main recreation first started operating
28.	Accomm	Recreation linked with accommodation on the farm yes/no/specify
29.	Retail	Recreation linked with retailing on the farm yes/no/specify
30.	New	Farms with recreation planning new recreation yes/no/specify
31.	Ex/Co/Mo	Existing recreation expanded/contracted/modified yes/no/specify
32.	Importance	Importance of recreation to the continued operation of the farm business.
33.	Charge	Charge made for main recreation yes/no.
34.	Reasons	Reasons for adoption of recreation.
35.	Contact	Agree to be contacted yes/no.
36.	Contact	Details of contact name and number.
37.	Comments	Allowing additional 'anecdotal' information to be included in the analysis.

Table 4.8 Database Variables.

Additional locational information is provided by the postcode sectors. These are used to generate thematic maps, based on the LQ statistic, which provide more detailed information about the geography of farm-based recreation within each county study area. Mapinfo, a geographical information systems (GIS) software package, is employed to create the thematic maps from the combination of the postcode sector data in the database and the postcode sector boundary information purchased from the Post Office. The use of the LQ statistic essentially means that the proportion of responding farms in each individual sector with recreation (or specific categories of recreational provision) are compared to the average for the county respondents as a whole. A figure below one indicates that a lower proportion of the farms in a given sector have recreational provision than in the county as a whole, whereas a figure above one shows that a higher proportion of farms in the sector have recreational provision than in the county as a whole. To record accurately the distribution of response, it is necessary to distinguish between sectors where there is no response and sectors where none of the respondents have recreational provision.

GIS mapping has never been used before to examine the distribution of diversified activities and has three key advantages in this context. First, it provides a unique opportunity to explore the geography of response within the counties and highlight any areas where there has not been any response. Secondly, thematic mapping provides a broad picture of the intra-county distribution of recreational activities in relation to features such as National Parks, AONB's, Heritage Coasts and areas of urban fringe. It also allows external fringe and intra-county concentration effects to be taken into account. Thirdly, the average size of postcode sectors broadly reflects population density and as such is a useful geographical unit for analysis.

However, the limitations of using postcodes as locational indicators must be acknowledged. Clearly, in a number of cases the postal address will be different to the location of the farm, because the farmer and family no-longer live in the farm house. In other cases, the farm may be fragmented over a large area and the postcode will only correspond to one part. Employing postcode sectors as broad locational zones should, as far as possible, minimise these inaccuracies and provide a broad picture, but will also limit the accuracy of the findings. Other, more precise, locational influences which may influence the location of recreational activities are explored in more detail subsequently.

4.3. The Collection of Primary Data, Phase 2. Ethnographic Case Studies.

The analysis of the results from the initial postal questionnaire phase of data collection enables many general trends in the adoption and non-adoption of farm-based recreation to be identified. However, identification of spatial patterns according to different types of recreation, farm characteristics and trends in the reasons for adoption and non-adoption do not provide any direct explanations of the phenomenon. Rather, they merely serve to highlight any positive or negative relationships which may exist between them. This section, therefore, considers the development of suitable methodologies and techniques of analysis which can provide an insight into the processes of these interactions.

(i). METHODOLOGY.

The methodology is sub-divided into ten parts. These represent a logical design sequence, similar to that advocated by Spradley (1980) and Yin (1994). Initially, the rationale underlying this phase of the research is presented. The subsequent parts then detail the issues involved in the development and implementation of an appropriate research programme.

(a). Research Rationale.

The design of this phase of the research had to fulfil the following criteria;

- I. to be primarily for illustrative purposes to complement and add perspective to the skeleton of information generated by the initial phase;
- II. to enable a detailed exploration and explanation of some of the processes influencing farm-based recreation. This is especially true in relation to the initiation, operation and evolution of recreational activities and their effects on the farm, individuals and the farm household;
- III. to allow a postmodern informed perspective which necessitates the selection of flexible, sensitive, reflexive methodologies which are able to identify, appreciate and represent difference, uniqueness and individual experiences.

(b). Access to Cases.

Prior to a consideration of appropriate data collection techniques, the nature of access to the phenomenon must be considered. Access often represents a significant problem (see

Hammersley and Atkinson 1995). In this case, the first phase of the research has already identified farm households willing to co-operate in further research. The conceptual focus of the work centres on household-level responses as a result of co-evolution between components both internal and external to the business.

(c). Data Collection Techniques.

Given the research rationale, an ethnographic case study methodology employing a combination of participant observation and in-depth interviews is proposed. Individual farms provide a highly suitable unit for this case study approach. Participant observation and in-depth interviews are ideally suited as they are responsive, appropriate to the subject matter, can be tailored to specific circumstances and elicit complex and detailed information. A major strength of case studies is that they bring together a variety of dimensions, and using multiple sources of evidence is one of three key case study characteristics identified by Yin (1994). Thus, a case study methodology examines what people are doing in their natural context, is well suited to studying processes as well as outcomes, and emphasizes reflexivity and uniqueness, both central to a postmodern informed approach. Case studies are also easily interpretable as a starting point on which further policy orientated research can be based.

Participant Observation seeks to gather data by participating in the day to day activities of people and, as such, provides an unusual opportunity for collecting data. There are a range of ways in which a researcher may engage in participant observation based on both involvement and detachment. The role may vary from complete observer to complete participant, and immersion need not be total or long-lasting. Whichever is the case a focus solely on the present may conceal important events that occurred before the entry of the observer. The participant observer may also change the situation just by their presence (Evans 1988).

Interviews are an extremely important source of data and may enable information to be generated which would be very difficult, if not impossible, to obtain otherwise. In-depth interviews (Spradley 1979) are typically conversations in which the researcher encourages the informant to relate, in their own terms, information about relevant events and issues, thus avoiding the imposition of theories. These emerge as the interview progresses in the process of interaction between researcher and respondent. The interviewer is not bound by a rigid questionnaire sequence and wording, although usually he/she does not approach the task without a back-up checklist.

Ethnography is associated with the importance of understanding the perspectives of the people under study, and of observing their activities in everyday life (Hammersley and Atkinson 1995). However, Spradley (1980) underlined the importance of clarifying ethnography and the methods it comprises in relation to the research discipline and specific project in which it is being employed. Interviewing and participant observation can be used in other forms of investigation and it is, therefore, necessary to make clear what is meant by ethnographic case studies in this research. Here, participant observation is employed primarily to provide a historical and social context which is used in subsequent in-depth interviews. The level of participation is likely to be highly dependent on the precise situation; however, where possible the researcher's biography is used to provide useful information. This two-way process is very important in the development of respect in the participant observation stage. Participant observation provides an invaluable context, uncovers important processes, and enables a working rapport to develop between researcher and researched. Nevertheless, it is the interview phase which generates most of the data. In this study, in-depth interviewing is employed as far as possible with all the major farm household actors to identify individual roles in the processes. Where necessary, a pragmatic approach is used to explore the roles of other important actors within the network but outside the household to provide multiple perspectives on important processes. Together these two components, participant observation and in-depth interviewing, comprise the 'ethnographic case study'. It is important to remember that this methodology, although informed by ethnography, is ethnographic in nature and makes no claims to be 'true' ethnography.

The method allows the validation of some accounts by comparisons with those of others, although it does raise practical problems, such as those associated with interviewing several members of the farm household independently. There are distinct advantages in combining participant observation with interviews; in particular, the biography of the researcher can be drawn upon during participant observation to develop a good rapport with the important actors. In addition, the data from each method can be used to illuminate the other for example, experiences as a participant observer can have an important effect on the interpretation of what people say in interviews.

(d). Case Selection.

Access to a range of cases is already facilitated, but the specific number and selection of cases goes hand-in-hand with the analysis of primary data from phase one and the data collection techniques outlined above. Overall, 154 of the respondents provided a contact

name and number and stated that they would be willing to participate in further research. This represents a total of 7% of the respondents, or 13% of the farms with some form of recreational provision. A more detailed breakdown of those respondents agreeing to participate in further work is provided in Figure 4.7 and Table 4.9. In terms of recreational provision, the recreation profile of the farms agreeing to be contacted for further research is very similar to that of the whole sample (See Table 4.9).

CATEGORY OF PROVISION COMBINATIONS		NUMBER OF FARMS AGREEING TO BE CONTACTED	% OF THOSE AGREEING TO BE CONTACTED WITH PERMANENT AND TEMPORARY RECREATION	% OF RESPONDING FARMS WITH PERMANENT AND TEMPORARY RECREATION
1	OPEN TO THE PUBLIC ONLY	15	11	9
2	BY ARRANGEMENT ONLY	26	20	19
3	CLUBS AND SYNDICATES ONLY	31	23	33
COMBINATIONS OF 1+2		11	8	4
COMBINATIONS OF 1+3		6	5	4
COMBINATIONS OF 2+3		18	14	11
COMBINATIONS OF 1+2+3		12	9	3
TOTAL PERMANENT		119	90	84
TEMPORARY ONLY		13	10	16
TOTAL TEMPORARY		42	32	45
TOTAL PERMANENT AND TEMPORARY		132	100	100
PERSONAL USE ONLY		22		
TOTAL		154		

Table 4.9. The incidence of different combinations of categories of recreational provision.

Within this framework, a strategic selection of cases, concentrating on a small number of households (20), is employed. This permits a rich mix of processes to be researched, putting flesh on the bare bones of the questionnaire findings. The use of 'ethnographic case studies' with a small number of 'key cases', is a response to the high level of complexity revealed by the postal questionnaire survey analysis. It permits a more detailed exploration of issues raised in the analysis of the postal questionnaire database than would be possible from a large number of less detailed interviews attempting to sample the breadth of recreational activities. There have been few attempts to reveal how any of the processes underlying this phenomenon work and this phase of the research is intended to be illustrative of these key processes. It also attempts to put into practice some of the recent theoretical developments presented in Chapter 3.

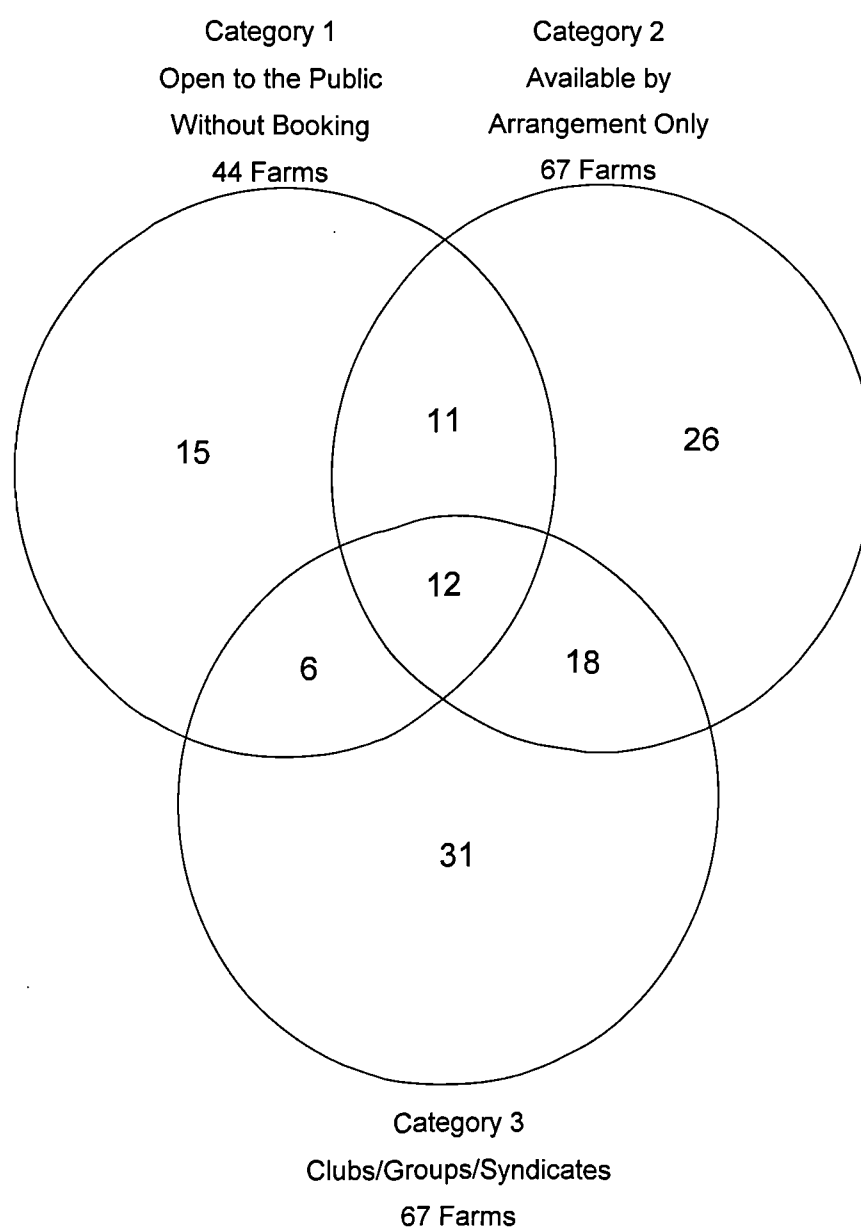


Figure 4.7. Number of farms by category of provision combinations agreeing to be contacted for further work.

To select the case studies, the sample is stratified into three groups. These groups are based on the analysis of motives for recreational provision from the postal questionnaire survey (see Chapter 8) and are more representative of the broad processes underlying recreational provision than category or type of recreational provision alone. Those farms agreeing to be contacted where the only recreational provision is for personal use are excluded at this stage. These are not a distinct focus of the research and an opportunity to explore processes associated with their provision will exist because they occur on many of the farms alongside permanent and temporary provision. The fixed sample of 20 is sufficient

to cover all the main categories of recreational provision and is divided according to the proportions of the three groups established from the postal questionnaire survey analysis. This ensures that the sample reflects the broad pattern of motives present in the questionnaire respondents (see Table 4.10).

	Permanent and Temporary Recreation in Postal Questionnaire Survey (%)	Sample (N)	Number Agreeing to Contact	Sampling %
Financial Motives	50	10	86	11.6
Non-Financial Motives (Social, Interest, Altruistic)	40	8	57	14.0
Other Motives	10	2	11	18.2
Total	100	20	154	13.0

Table 4.10. Sampling for case studies.

Selection of the individual cases from within these strata takes place using random numbers until the requisite number of cases (plus some reserves to allow for non-contact) are identified. The selected cases are then contacted by evening phone calls explaining the nature of the research and arrangements made for visits. Subsequently, arrangements are confirmed by a phone call on the day prior to the visit. Successful contact was made with all 20 of the initial case selections. However, two were unable to participate in further research during the timescale available, owing to agricultural commitments, and two 'reserves' were successfully substituted for these.

(e). Case Characteristics.

It is appropriate at this point to present the basic characteristics of the case studies. These are outlined in Table 4.11 and compared, for information, with the postal questionnaire survey respondents. Considering the relatively small size of the sample, and the fact that it is selected to be illustrative rather than representative, it is broadly similar to the average profile which would be expected from the postal questionnaire respondents.

		CASE STUDIES ACTUAL FARMS (N)	EXPECTED (N) BASED ON THE POSTAL QUESTIONNAIRE RESPONDENTS
COUNTY	DURHAM	4	1.9
	GLOUCESTERSHIRE	4	3.3
	LEICESTERSHIRE	1	2.6
	KENT	5	3.5
	HERTFORDSHIRE	2	3.5
	GWYNEDD	1	1.4
	CHESHIRE	1	1.9
	HUMBERSIDE	2	1.9
	TOTAL	20	20
RECREATION CHARACTERISTICS	CATEGORY 1	10	4
	CATEGORY 2	7	7.4
	CATEGORY 3	9	10.4
	CATEGORY 4	8	8.8
	CATEGORY 5	12	8.2
	AVERAGE NUMBER OF PERMANENT ACTIVITIES PER FARM	3.2	2.2
	AVERAGE NUMBER OF TEMPORARY ACTIVITIES PER FARM	1	1.3
FARM CHARACTERISTICS			
SIZE	UP TO 20 HECTARES	2	1.2
	20-100 HECTARES	7	6.6
	101-300 HECTARES	7	7.6
	OVER 300 HECTARES	4	4.6
FARM TYPE	ARABLE CROPPING	11	12
	SHEEP PRODUCTION	5	6.6
	BEEF PRODUCTION	5	7.2
	DAIRYING	5	4.6
	HORTICULTURE	5	1.4
	PIGS/POULTRY	1	1.6
	OTHER TYPE	0	0.4
	NO AGRICULTURAL PRODUCTION	1	0.4
	AVERAGE NUMBER OF TYPES PER FARM	1.7	1.8
TENURE	OWN MORE THAN 50% OF THE FARM	15	13
	RENT MORE THAN 50% OF THE FARM	2	6
	MANAGE THE FARM FOR A COMPANY OR SOMEONE ELSE	3	1

Table 4.11. Case study characteristics.

(f). Reflexivity and Practical Considerations.

A postmodern informed perspective demands that the issue of reflexivity is addressed. Reflexivity rejects the positivist and naturalist idea that social research can be carried out in such a way that its findings are insulated from wider society and the particular biography of the researcher. Clearly, when the researcher is employed as the research tool, particular

circumstances can never be exactly replicated. Thus it is argued that, rather than engaging in futile attempts to eliminate the effects of the researcher completely, efforts should be made to understand and employ them. By including and exploiting the role of the researcher in the research process it is possible to produce and justify valid accounts of the social world (Hammersley and Atkinson 1995).

As Hammersley and Atkinson (1995) point out in their discussion of in-depth interviewing, all interviews, like any social interaction, are structured by both researcher and informant and, notably, have their own roles and power structures. Similar observations can be made about participant observation. The personal characteristics of the researcher (such as clothes, gender, age, appearance, experience, attitude, personal politics, personality, competence in participation) and how these relate to those of the individual actors are an extremely important influence on data collection. Interactions between researcher and researched are fundamentally governed by their context, and so it is not possible to attempt to understand specific comments/actions without reference to their immediate and wider context. This research, therefore, attempts to employ, evaluate and document the role of the researcher in the research process as it is clearly naïve to assume that participant observation and in-depth interviews do not influence what people say and do (Silverman 1993).

(g). Structure and Content.

In keeping with the nature of the research, the precise structure and content of participant observation and in-depth interviews are largely dependent on the exact case and circumstances. Typically a full day was spent at each of the twenty cases. However, this largely reflects the number of individuals involved and the number of recreational activities provided. As a result the briefest ethnographic case study, involving one individual and a temporary recreational event, lasted only a couple of hours, whereas in three cases a second visit was necessary because of the complexity of recreational provision and/or the structure and availability of the farm household. The balance of time spent between participant observation and in-depth interview(s) in each ethnographic case study was roughly equal.

The degree and nature of participant observation largely reflected the type of recreational provision. For example, where recreational provision was either temporary (for example, one event per year) or required very low day-to-day labour inputs, participant observation primarily involved agricultural activities. Nonetheless, this provided a valuable opportunity to gain an understanding about the farm business, members of the household and the role of

recreational activities. In other cases where recreation comprised a more important component of farm business operations participation was generally focused more on the recreational activities. Participant observation usually involved only one individual of the farm business, often the 'main' recreation actor. Participation ranged from day-to-day agricultural activities such as a visit to a local agricultural merchants, feeding calves and checking livestock (where the practical agricultural experience of the researcher proved invaluable for establishing credibility) to recreational activities such as walking a farm trail and discussing the accompanying interpretation material, accompanying a farm household member on his money collection round of the business' fishing lakes, sitting in the office/entrance of a childrens play barn and quad biking round the field margins of an upland farm. In many cases, the precise nature of participant observation reflected the day-to-day role of many individuals in the operation of both recreational and agricultural business activities.

The precise format of the in-depth interview stage again reflects a variety of factors. A pragmatic approach is employed; however, the content of the interviews is very loosely based on issues identified during participant observation and on a comprehensive schedule of topics drawn up in advance. It should be noted that this schedule is adjusted throughout this phase of the research and not all the items are of relevance in each case (Yin 1994). The availability of individuals and their respective roles in recreational provision are primary considerations in the in-depth interview process. Wherever possible, interviews are conducted with all the adult members of the farm business. However, this was not always possible (Table 4.12). Of the 45 adults identified on the 20 case study farms 30 were successfully interviewed. There were a variety of reasons for the failure to interview 15 adults, in some cases they were off-site, in others they had off-farm employment and some were away at college. Engagement in off-farm employment was a particular handicap in relation to two generation 'joint farms' where the lowest proportion of successful interviews was achieved. A greater proportion of successful interviews were achieved with males in the sample (73%) compared with females (58%).

The in-depth interview stage also provides a unique opportunity to collect detailed quantitative information about individual recreational activities. It is not possible to collect this type of information from the extensive postal questionnaire phase of the research for two interrelated reasons. First, the 'closed' questions adopted in the postal questionnaire survey are not suitable for capturing complex information such as household/business structure or labour allocations. Second, the abundance of multiple recreational activities on the

responding farms (an average of over 3 permanent activities and 1 temporary one, per case study farm - 84 in total) means that it is impossible to identify direct relationships between individual types of recreational activities and farm and business characteristics using the postal questionnaire survey responses. As a result the in-depth interview stage generated detailed quantitative and qualitative information pertaining to 84 individual recreational activities.

		FARMS	CASE STUDY FARMS - TOTAL ADULTS			IN-DEPTH INTERVIEW - TOTAL ADULTS		
FARM HOUSEHOLD COMPOSITION			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
MANAGER	NON-FAMILY	3	3	0	3	3	0	3
SINGLE GENERATION	(A). RECENT SUCCESSOR/ NO YOUNG DEPENDANTS	3	3	2	5	3	1	4
	(B). NO ON FARM SUCCESSOR/ DEPENDANTS.	2	2	2	4	1	2	3
TWO GENERATION	(A). YOUNG DEPENDANTS.	4	6	4	10	4	2	6
	(B). JOINT FARM.	4	7	7	14	5	3	8
	(C). OLD DEPENDANTS.	2	3	2	5	2	1	3
THREE GENERATION	THREE DEPENDANT GENERATIONS	2	2	2	4	1	2	3
TOTAL		20	26	19	45	19	11	30

Table 4.12. Case study adults interviewed.

(h). Data Recording.

Two distinct methods of data recording are employed. Where possible during participant observation, short field notes are made. These are the traditional means in ethnography for recording observational data. Subsequently, as soon as possible after the event, expanded notes are made. These notes comprise detailed descriptions of activities, events, interactions and their contexts, including researcher inputs. In-depth interviews are recorded in the form of detailed written notes as the interview proceeds, unless this jeopardises the informal nature of the situation. Recording in this way allows much more information to be captured in comparison to the short field-notes employed in participant observation.

(i). Data Analysis.

The ethnographic case studies generate both quantitative and qualitative information relating to the 20 farms and 84 activities examined. Analysis of the quantitative elements is undertaken using a similar approach to that outlined in 4.2 (iii). This develops a database containing two broad types of information about each of the 84 recreational activities. First, characteristics specific to the recreation itself, such as capital investment, and second,

general characteristics of the farm business, such as farm size, type, and household structure.

Analysis of the qualitative data generated from the ethnographic case studies follows a different pattern. It is recognised that the analysis of ethnographic data is not a distinct stage in the research and continues throughout the whole process (Silverman 1993, Yin 1994, Hammersley and Atkinson 1995). However, the adoption of a general analytical strategy is advocated by Miles and Huberman (1984). In this case, initial analysis of notes and transcripts (organising the data, searching for trends, categories, themes and patterns) proceeds in two dimensions: a top down approach; which is based on theoretical constructs identified from the literature review and conceptual framework (Chapters 2 and 3 respectively); and a bottom up approach, based around the research itself. This ensures a balanced appraisal of the information. Subsequently, a cross case analysis is used to integrate the data from the multiple case studies (Yin 1994). This provides a comparative and illustrative analytical approach. The major problem with cross case triangulation is that it ignores the context-bound nature of the data (Silverman 1993), this issue is borne in mind and addressed by the use of individual cases to highlight specific issues.

(j). *Presentation of Results.*

It is '*widely recognised that 'the ethnography' is produced as much by how we write [and present the results] as by the processes of data collection and analysis*' (Hammersley and Atkinson 1995:239). The mode of this research is ethnographic, rather than a complete engagement with ethnography, but these observations are still very relevant. One of the most important considerations is that ethnographic research should take into account the potential audiences for the finished products. The process of presentation for different audiences is an important component of ethnographic research which may promote new analytic insights. Clearly, this research fulfils an explicit academic purpose.

More practical aspects of presentation also require consideration. As Hammersley and Atkinson (1995:240) observed, '*the world does not arrange itself into chapters and sub-headings for our convenience*'. A broadly chronological structure is presented which examines the cross case issues of initiation, operation and evolution (identified in the conceptual framework). The sub-structure within these general themes is determined by research outcomes and serves to highlight both cross case differences and similarities. The presentation follows a broadly narrative pattern which includes contextual summaries of individual cases. Selected quotes and observations are used to highlight pertinent points.

This approach allows an explicit acknowledgment of the context-bound nature of the data at all times (Silverman 1993).

4.4. Stages of Data Analysis - The Integration of Phases 1 and 2.

Having outlined the analytical techniques to be used, the subsequent analysis follows 5 main stages and moves from predominantly descriptive analysis in the early stages, based mainly on the results from the postal questionnaire survey, through to more detailed analysis which integrates the results from both the postal questionnaire survey and the ethnographic case study phases, representing a true integration of methodologies.

Stage 1 (Chapter 5) presents primary analysis of the data. This is concerned with the overall nature and incidence of recreation in the sample and the inter and intra-county distribution of recreation. A contextual agricultural background to each of the study areas accompanies this analysis.

Stage 2 (Chapter 6) is concerned with an analysis of farmers' constructions of recreation, an issue that has emerged from the postal questionnaire analysis.

Stage 3 (Chapters 7 and 8) focuses on the characteristics of the recreational activities themselves and explores the motives for the provision of recreation. Data from both the postal questionnaire survey and ethnographic case studies is integrated.

Stage 4 (Chapter 9) is concerned with the wider relationship between recreational provision and the farm business as a whole. Data from both the postal questionnaire survey and ethnographic case studies is integrated.

Stage 5 (Chapter 10) examines the factors underlying non-adoption of recreational provision from the postal questionnaire analysis.

4.5. Summary.

This chapter has outlined the multistage methodology to be used in the study of farm-based recreation. Initially, the development of a sampling framework was considered. The discussion then detailed the techniques of data collection and analysis involved in the two major phases of the research. Six main summarising points can be made.

1. The study of farm-based recreation is greatly handicapped by the lack of comprehensive
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secondary data sources. As a result of these limitations, it is not possible to undertake a comprehensive, recreation-specific sample. Instead, it has been necessary to develop an alternative sampling approach.

2. Cluster analysis is employed to develop a stratified sampling framework based around county units and agricultural characteristics. This is a very valuable exercise because it ensures that a wide range of important agricultural characteristics present in England and Wales, which may be significant in the supply of different types of recreation, is included in the sample. It is especially important as recreation is associated with demand from both tourist and resident populations and may, therefore, be important over a larger geographical area than, say, farm-based accommodation.
 3. An informative demand dimension is used to select counties from each stratum for sampling. This ensures that the complex mix of both tourist and non-tourist demand associated with farm-based recreation is explored within the framework of the agricultural strata.
 4. The exploratory nature of the research and the geographically diverse locations of the sampling areas (in part a consequence of the fact that sampling could not be recreation targeted) means that an extensive postal questionnaire is employed for the first stage of analysis. This is designed to identify the incidence and types of recreation associated with different farm characteristics, locations and the reasons for adoption and non-adoption of recreation.
 5. The second stage of research employs a small number of detailed ethnographic case studies in the form of an exploratory cross-case analysis. This permits a detailed investigation of the complex interactions occurring on the sampled farms at a level which cannot be obtained from a postal questionnaire. This stage of the analysis employs a reflexive approach which actively acknowledges the role of the researcher in the research process.
 6. The development of suitable methodologies has been informed throughout by the theoretical framework presented in Chapter 3. The methodology itself represents a mix of quantitative and qualitative techniques. Such a multi-stage methodology, which reflects the fact that different techniques are suited to gathering different information and draws upon the most appropriate techniques for particular tasks, is an important component of a postmodern informed approach.
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5. THE INCIDENCE AND DISTRIBUTION OF FARM-BASED RECREATION.

This chapter analyses the database of farm-based recreation, derived from the postal questionnaire survey, to explore its incidence and geographical distribution between and within the 8 county study areas. The work is mainly descriptive in nature and consequently much of the explanation is necessarily tentative or speculative. The results and analysis are divided into three main sections. In section 5.1, the discussion concentrates on the overall incidence of farm-based recreational activities amongst the postal questionnaire survey respondents. Section 5.2 examines the distribution of recreational activities between the county study areas through database manipulation using percentages and the LQ statistical technique. It acts as a precursor to a more detailed analysis in the third section which examines the geography of recreation within each of the county study areas using farm postcode sectors as locational indicators for thematic mapping. This is accompanied by a contextual background to each of the county study areas which furnishes information on agriculture, tourism and recreation.

5.1. The Incidence of Farm-Based Recreation.

The overall results of the postal questionnaire are presented in Table 5.1. If ALL activities are included, they indicate that some form of recreational activity was present, or had taken place in the previous 12 months, on over half of the responding farms (1161). However, on 299 of these farms, the activities were solely for personal use. Excluding these, a total of 862 farms with permanent or temporary recreational activities (41% of the responding farms) can be identified. Of these, 728 (34% of the responding farms) had some form of permanent recreational facility or commitment.

Although a highly respectable response rate was attained, there remains considerable potential for an element of bias. On this basis, a simple calculation, that assumes the proportion of recreation in the non-respondents to be the same as that in the responses received based on the follow-up evidence is used to produce an estimate of the extent of recreational activities on farms as a whole (See Figure 4.5). Focusing on permanent activities gives an adjusted figure of 30% of farms in England and Wales having some form of permanent recreational facility (Table 5.1). This level of recreational activity is significantly higher than those reported by existing studies. Recreation has been typically found on about 10-15% of farms (Bull and Wibberley 1976, Carruthers 1986, Gasson 1987, Ilbery *et al* 1996). The lack of a functional definition and classification of recreation in these studies may mean that they have failed to include certain types of activities or categories of recreational provision. In addition, these studies place more emphasis on activities which are of commercial importance to farm businesses. In contrast, this study encompasses all

forms of activities, ranging from recreation as a commercial enterprise to non-commercial forms of recreation such as traditional and altruistic activities. The next three sub-sections explore the incidence of recreational provision in more detail and disaggregate the incidence of recreation by category of provision, type of provision and multiple provision respectively.

(i). THE INCIDENCE OF RECREATION BY CATEGORY OF PROVISION.

It is possible to disaggregate the incidence of recreation according to the categories of provision developed in Chapter 1. Analysis of this sub-division (Table 5.1) reveals that 31% of the responding farms have some type of recreation for personal use, whereas less than 9% have activities that are available to the public without prior arrangement. This is far more in keeping with previous estimates, supporting the observation about commercial facilities made above. The category of recreational events and visits, which had occurred on 18% of farms in the past 12 months, with the notable exception of the DART (1974) study which examined farm open days, is one which has been almost exclusively ignored in previous research. It is also unclear the extent to which previous studies have elicited information relating to recreation by members of private clubs, groups or syndicates. This category of recreation is widespread on farms (21%), yet in most cases the farmers did not consider these to be 'unconventional' activities and thus 'diversification'. Many farmers who did have recreation in this category completed the subsequent sections relating to farms with no recreational activities, despite clear instructions (this issue is explored in Chapter 6). Further analysis will identify the specific types of recreation involved, but it is possible to speculate that it will be comprised primarily of 'traditional' recreational activities which have taken place as part of farm life for many years. This highlights a potential inadequacy of earlier research and perhaps helps to account for the wide difference in the extent of recreation evident in this survey to that recorded in previous ones.

The subsequent analysis focuses predominantly on the three categories of permanent recreational provision (1, 2 and 3 in Table 5.1) which together comprise the majority of activities involving public access to farms and which will be referred to simply as permanent recreation. Temporary recreational activities are significantly different in character and merit separate consideration. To avoid confusion, the analysis also presents the results relating to recreation for personal use separately.

	CATEGORY OF PROVISION	FARMS (N)	PERCENTAGE OF RESPONDING FARMS	ADJUSTED FOR NON-RESPONSE
1	OPEN TO THE GENERAL PUBLIC WITHOUT BOOKING.	183	9%	8%
2	AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY.	323	15%	14%
3	ONLY AVAILABLE TO MEMBERS OF PRIVATE GROUPS / SYNDICATES / CLUBS.	450	21%	18%
	TOTAL PERMANENT RECREATION	728	34%	30%
5	RECREATIONAL EVENTS / VISITS IN THE PAST 12 MONTHS.	382	18%	16%
	TOTAL PERMANENT AND TEMPORARY RECREATION	862	41%	36%
4	ONLY AVAILABLE FOR PERSONAL USE, FAMILY, FRIENDS, EMPLOYEES.	662	31%	26%
	TOTAL ALL FORMS OF RECREATION.	1161	55%	46%

Table 5.1. The overall incidence of farm-based recreation, by category of provision, including adjustments for non-response (Source: Author's survey).

(ii). THE INCIDENCE OF RECREATION BY TYPE OF PROVISION.

This sub-section introduces individual types of recreation into the analysis. For simplicity, the discussion focuses on each category of provision separately. It is divided into three parts, with the first maintaining the focus on permanent recreational activities and presenting both a general and a detailed picture. The second and third parts present temporary recreational events and recreation for personal use respectively. In each case, the tables are arranged in descending order of total incidence.

(a). Permanent Recreational Activities.

The total provision of recreational activities on farms is dominated by rough and game shooting with each occurring on over 9% of the responding farms. Equestrian activities (riding and facilities), fishing (both coarse and game), clay pigeon shooting, open farms and educational interests also feature strongly, with each occurring on between 3% and 7% of the responding farms. Table 5.2 lists the total incidence of all forms of recreational activities on farms. This analysis highlights the occurrence of numerous types of recreation which have not previously been documented on farms. It is a reflection of the recent development of certain more innovative recreational uses of farm resources. It is also relevant, at this point, to note the existence of an 'other' category which comprises a variety of activities. These are unusual activities, such as land yachting and water sports, which exhibit an extremely low incidence in the sample and are not present in sufficient numbers to merit

specific attention. Nonetheless, this grouping is indicative of innovation and reinforces the diversity of niche market opportunities which recreational activities present.

RECREATION TYPE	RESPONDING FARMS BY CATEGORY OF PROVISION (N)			TOTAL FARMS (N)	% OF RESPONDING FARMS
	OPEN TO THE GENERAL PUBLIC WITHOUT BOOKING.	AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY.	ONLY AVAILABLE TO MEMBERS OF PRIVATE GROUPS / SYNDICATES / CLUBS.		
Game Shooting.	5	35	217	256	12.1
Rough Shooting.	7	92	91	189	9.0
Coarse Fishing.	37	24	89	144	6.8
Facilities for Riding: Gallops, Cross Country Course.	11	48	56	111	5.3
Educational Facilities.	19	83	6	106	5.0
Clay Pigeon Shooting / Gun Club.	11	44	52	105	5.0
Horses for Riding / Trekking / Lessons.	24	45	27	90	4.3
Open Farm.	18	47	11	73	3.5
Game Fishing.	8	13	49	70	3.3
Access Agreements.	40	13	2	55	2.6
Picnic Site.	26	6	1	33	1.6
Facilities for Motor Sport: Go- Karting, Quad Bikes, Rallying, Off- Road 4x4.	8	16	8	31	1.5
Facilities for Models.	1	10	20	30	1.4
Village Sports Pitches.	9	6	15	30	1.4
Laid out Farm Trails / Nature Trails / Cycle Trails.	25	1	2	28	1.3
Farm Restaurant, Teas, Coffee Shop.	24	2	1	27	1.3
Nature Reserve / Country Park / Gardens.	18	4	4	26	1.2
Facilities for Farm Birthday Parties.	13	9	1	22	1.0
Adventure Play Area / Children's Play Area.	14	3	4	21	1.0
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	19	2	0	21	1.0
Golf Course / Driving Range / Crazy Golf / Pitching.	15	1	3	16	0.8
War Games / Paintballing.	1	7	5	13	0.6
Museum.	6	6	1	12	0.6
Airfield / Gliding / Parachuting.	5	1	3	9	0.4
Other Types.	4	4	3	12	0.6
TOTAL	183	323	450	728	34

Table 5.2. The overall incidence of different types of permanent recreational activities (Source: Author's survey).

Table 5.2 details category-type interactions. Significant category-type interactions exist which complicate the interpretation of the overall picture presented so far. For example, in relation to game shooting, the majority of the activities are available only to members of private clubs or syndicates. In contrast, the provision of catering activities and rare breeds farms is predominantly on an 'open to the general public without booking' basis. Diversity rapidly becomes a dominant theme. This is evident in both the mixture of category-type

interactions and the range of different activities themselves, including many which have a relatively low incidence. In some cases, these appear to have been either overlooked or lost in amalgamated groups by previous research. It is possible to identify types of recreation which occur either predominately as a single category of provision, as for example with farm catering, or in association with a number of categories of provision, as for example with facilities for riding. In terms of diversity of type, 15 different types of recreational activity each occur on 2%, or less, of the responding farms. These include, for example, rare breeds parks, airfields/parachuting and golf courses.

An exploration of the incidence of recreation is more easily facilitated by examining each category separately rather than attempting to construct a highly complex contingency table of the overall results presented in Table 5.2.

Recreation Open to the Public Without Booking. Of the five individual categories of provision, it is this one which exhibits the greatest diversity (Table 5.3). Although the most abundant types are access agreements and coarse fishing, present on 40 and 37 farms respectively, a further 13 different types are found on over 10 or more farms. Expressed as a percentage of the incidence of the type as a whole, an interesting dichotomy becomes apparent. Recreation types in this category of provision represent either a relatively low or high proportion of the recreation type total. For example, although coarse fishing represents the second most common type of recreation in this category of provision, as a whole this is only 26% of the total number of farms with some form of fishing activities. In contrast, this category of provision accounts for 90% of the total provision of rare breeds farms. This reinforces the idea that certain types of recreation are very strongly associated with this category of provision (specific, for example rare breeds) while the provision of other types occurs in a range of different ways (universal, for example coarse fishing).

Recreation Available by Arrangement Only. Recreation available by 'arrangement only' exhibits a distinct profile of types (Table 5.4). This category is, however, concentrated between a smaller number of different types than the previous one. The proportional dichotomy observed in relation to the previous category is also far less distinct. This suggests that the provision of this category is more universal and less dependent on the specific type of recreation.

RECREATION TYPE	FARMS (N)	% OF CATEGORY	% OF TYPE
Access Agreements.	40	22	73
Coarse Fishing.	37	21	26
Picnic Site.	26	15	79
Laid out Farm Trails / Nature Trails / Cycle Trails.	25	14	83
Horses for Riding / Trekking / Lessons.	24	13	27
Catering: Farm Restaurant, Teas, Coffee Shop.	24	13	89
Educational Facilities.	19	11	18
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	19	11	90
Open Farm.	18	10	25
Nature Reserve / Country Park / Gardens.	18	10	70
Golf Course / Driving Range / Crazy Golf / Pitching.	15	8	94
Adventure Play Area / Children's Play Area.	14	8	67
Farm Birthday Parties.	13	7	60
Facilities for Riding: Gallops, Cross Country Course.	11	6	10
Clay Pigeon Shooting / Gun Club.	11	6	10

Table 5.3. Breakdown of recreation available to the public without booking (excluding incidences of less than 10) (Source: Author's survey).

RECREATION TYPE	FARMS (N)	% OF CATEGORY	% OF TYPE
Rough Shooting.	92	28	49
Educational Facilities. School Visits, College Visits.	83	26	78
Facilities for Riding: Gallops, Cross Country Course.	48	15	43
Open Farm.	47	15	64
Horses for Riding / Trekking / Lessons.	45	14	50
Clay Pigeon Shooting / Gun Club.	44	14	42
Game Shooting.	35	11	14
Coarse Fishing.	24	7	17
Facilities for Motor Sport.	16	5	52
Game Fishing.	13	4	19
Access Agreements.	13	4	24
Facilities for Models.	10	3	33

Table 5.4. Breakdown of recreation available by arrangement only (excluding incidences of less than 10) (Source: Author's survey).

Recreation for Clubs, Syndicates or Groups. The third category of provision is concentrated amongst even fewer different recreation types. In this case, game shooting dominates, occurring on nearly 50% of farms with some form of this category of recreation. Rough shooting and coarse fishing are also important components of this category of provision (Table 5.5).

RECREATION TYPE	FARMS (N)	% OF CATEGORY	% OF TYPE
Game Shooting.	217	48	85
Rough Shooting.	91	20	48
Coarse Fishing.	89	20	62
Facilities for Riding: Gallops, Cross Country Course.	56	12	50
Clay Pigeon Shooting / Gun Club.	52	12	50
Game Fishing.	49	11	70
Horses for Riding / Trekking / Lessons.	27	6	30
Facilities for Models.	20	4	67
Village Sports Pitches.	15	3	50
Open Farm	11	2	15

Table 5.5. Breakdown of recreation for clubs, syndicates or groups (excluding incidences of less than 10) (Source: Author's survey).

(b). Temporary Recreational Activities.

Temporary recreational events and visits are widespread. They had occurred on 382 (18%) of the responding farms in the previous 12 months. In the majority of cases (65%), they were associated with farms with some other form of permanent recreational activity and only 138 (7%) of the responding farms had just temporary recreational provision.

A breakdown of the different types of temporary recreational activities is presented in Table 5.6. Farm open days, encompassing a range of activities, are the most common form. These had occurred on 9% of the responding farms in the previous 12 months. Other events or visits exhibit a much lower incidence but nonetheless encapsulate some interesting types, perhaps the most unique being described as an illegal rave (Farm 850). Two notable examples of traditional agricultural events include ploughing matches and sheep dog trials, which had occurred on 1.6% and 1% of the responding farms respectively.

RECREATION TYPE	FARMS (N)	% OF CATEGORY	% OF RESPONDING FARMS
Farm Open Days: Demonstrations, Working Farm Tours, Tractor Rides, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	189	49	9.0
Organised Group Visits (Caravan Rallies / Group Camps).	72	19	3.4
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	50	13	2.4
Motor Sport Events.	40	10	1.9
Ploughing Matches.	33	9	1.6
Sheep Dog Trials.	21	5	1.0
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	20	5	0.9
Machinery Rallies.	15	4	0.7
School Visits, College Visits.	13	3	0.6
Concerts / Fairgrounds / Circus.	12	3	0.6
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	5	1	0.2
Historic Battle Re-enactments.	4	1	0.2
Other Types.	2	0.5	0.1
TOTAL FARMS WITH ACTIVITIES	382	-	18

Table 5.6. The incidence of different types of temporary recreation (Source: Author's survey).

(c). Recreation for Personal Use.

Although included primarily as a method of ensuring unambiguity and avoiding confusion between recreation for personal use and other forms of recreation, the results are in themselves of some interest. They may provide useful indicators of the types of recreation with which farmers are already familiar and as such types which may be more likely to develop in the future. Over 31% (662) of the responding farms had some form of recreation for personal use. A total of 45% of these farms had no other form of permanent or temporary recreational provision. This illustrates the value of clearly identifying these farms and excluding them from the primary analysis. This category of recreation is dominated by rough, game and clay pigeon shooting (occurring on 60%, 45% and 21% respectively of farms in this category). Horses for riding, coarse fishing and riding facilities also feature strongly (Table 5.7).

RECREATION TYPE	NUMBER OF FARMS	% OF CATEGORY	% OF RESPONDING FARMS
Rough Shooting.	396	60	18.8
Game Shooting.	298	45	14.1
Clay Pigeon Shooting.	140	21	6.6
Horses for Riding	128	19	6.1
Coarse Fishing.	71	11	3.4
Facilities for Riding: Gallops, Cross Country Course. Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	68	11	3.2
Game Fishing.	40	6	1.9
Farm Birthday Parties.	29	4	1.4
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	28	4	1.3
Facilities for Models.	7	1	0.3
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	6	1	0.3
Nature Reserve / Country Park / Gardens.	6	1	0.3
Adventure Play Area / Children's Play Area.	5	1	0.2
Other Types.	28	4	1.3
TOTAL	662	100	31

Table 5.7. The incidence of different types of recreational activities for personal use (Source: Author's survey).

(iii). COMBINATIONS OF CATEGORIES OF RECREATIONAL PROVISION.

The initial analysis, by discrete categories and types, disguises the fact that many farms have recreational activities of more than one category of provision. This explains why in all cases the percentages of farms corresponding to each category of recreation do not reconcile with the overall total. This factor alone greatly complicates the analysis. Theoretically, a total of 31 different combinations of the five categories of provision exist, ranging from farms with only a single category through to farms with all five categories of recreational provision. These theoretical possibilities are simplified into the 10 groups presented in Table 5.8. The most abundant group is farms where the only recreational provision is for personal use.

Rather than using all these groups, it is beneficial to concentrate on the 728 farms with permanent recreation and consider combinations of the three categories of permanent provision. To avoid confusion, recreation solely for personal use is excluded and temporary activities are presented as sub-groups. This leaves 7 possible combinations of permanent provision. The relative incidence of these different permanent combinations is illustrated in Table 5.9 and Figure 5.1.

	RECREATION	FARMS (N)	% OF RESPONDING FARMS
1	OPEN TO THE PUBLIC WITHOUT BOOKING ONLY (PERMANENT)	43	2
2	AVAILABLE BY ARRANGEMENT ONLY (PERMANENT)	60	3
3	CLUBS AND SYNDICATES ONLY (PERMANENT)	133	6
4	PERSONAL USE ONLY	299	14
5	TEMPORARY ONLY	67	3
COMBINATIONS OF PERMANENT (1 AND/OR 2 AND/OR 3)		51	2
PERMANENT AND PERSONAL (1 AND/OR 2 AND/OR 3 AND 4)		193	9
PERMANENT AND TEMPORARY (1 AND/OR 2 AND/OR 3 AND 5)		145	7
PERMANENT AND TEMPORARY AND PERSONAL (1 AND/OR 2 AND/OR 3 AND 4 AND 5).		103	5
TEMPORARY AND PERSONAL (4 AND 5)		67	3
TOTAL ALL FORMS OF RECREATION		1161	55
TOTAL PERMANENT AND/OR TEMPORARY		862	41
FARMS WITH NO RECREATION		938	45
TOTAL		2099	100

Table 5.8. Grouped combinations of provision (Source: Author's survey).

	CATEGORY OF PROVISION COMBINATIONS	NUMBER OF FARMS	% OF THOSE WITH PERMANENT RECREATION	NUMBER OF FARMS WITH TEMPORARY RECREATION	% WITH TEMPORARY RECREATION	% OF TEMPORARY RECREATION
1	OPEN TO THE PUBLIC WITHOUT BOOKING ONLY	78	11	24	31	6
2	AVAILABLE BY ARRANGEMENT ONLY	160	22	57	35	15
3	CLUBS AND SYNDICATES ONLY	282	39	63	22	16
1 and 2		35	5	22	63	6
1 and 3		40	6	17	43	4
2 and 3		98	13	43	43	11
1 and 2 and 3		30	4	22	73	6
TOTAL PERMANENT		728	100	248	34	65

Table 5.9. The incidence of different combinations of permanent categories of recreational provision (Source: Author's survey).

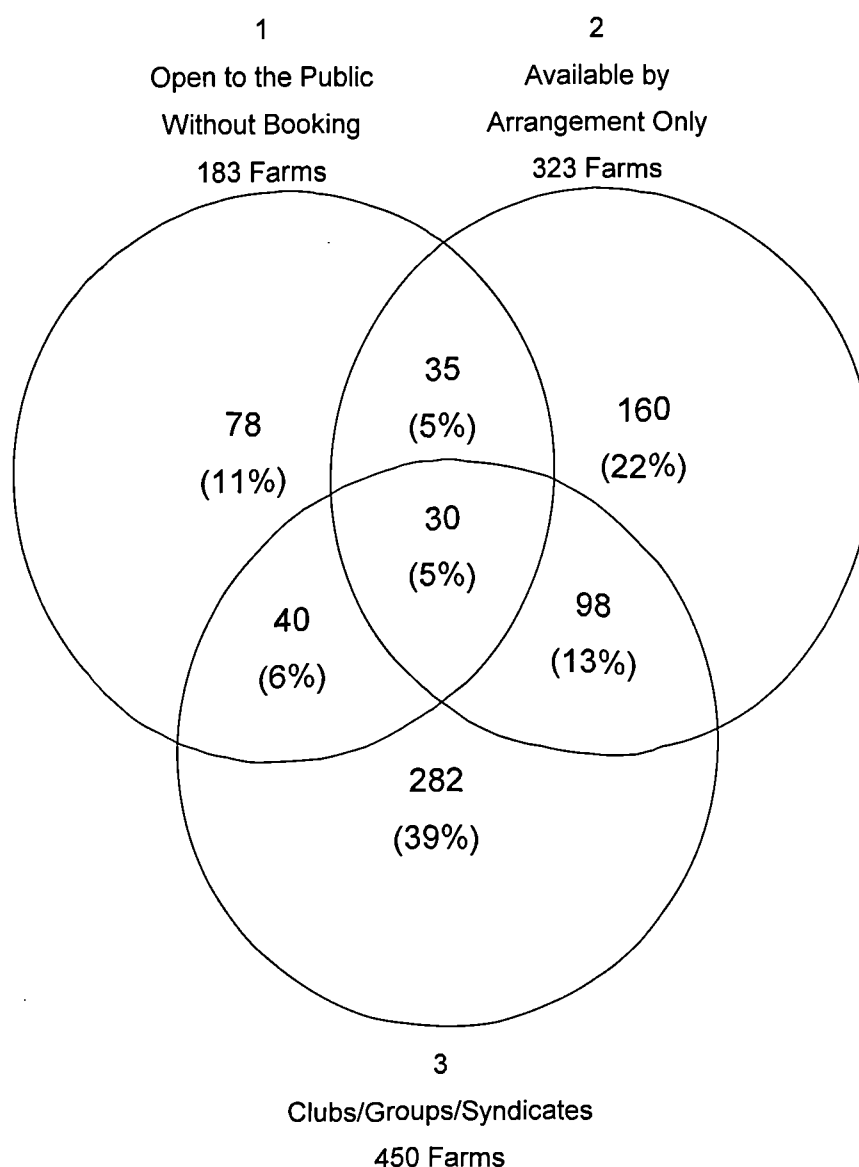


Figure 5.1. Number of farms with permanent recreation by category of provision combinations (Percentage of farms) (Source: Author's survey).

Farms with a single category of permanent provision comprise a clear majority, accounting for 72% of the farms with some form of permanent recreational provision. Recreation for clubs/groups/syndicates is the dominant single category of provision, occurring on 39% of farms with permanent recreation. Farms with two categories of provision are less widespread, occurring on 24% of the farms with permanent recreation. In this case, the incidence of category 2 (by arrangement only) is most common in conjunction with category 3 (clubs/groups/syndicates), perhaps reflecting the compatibility of these forms. Farms with all three categories of provision represent less than 5% of the farms with permanent

recreation (Table 5.9). If the sub-grouping of temporary recreation is introduced, 65% of these activities are found on farms with some form of permanent recreation. This may reflect the fact that farms with existing permanent provision are more likely to use this as a springboard for the provision of temporary events. This may be especially true where the events fulfil a role as a marketing gimmick. This association is strongest on farms with all three categories of provision (73%) and categories 1 (open to the public without booking) and 2 (by arrangement) of recreational provision (63%) and weakest on farms with only category 3 (clubs and syndicates) of recreational provision (22%), although in terms of absolute numbers of farms with temporary recreation, this represents the largest sub-group.

Having considered the farms with more than one category of recreational provision, the logical extension to this discussion is to account for those farms with more than one type of recreational provision. A breakdown of such is provided in Figure 5.2. This illustrates the high frequency of these farms. Over half of the farms with permanent recreational activities have 2 or more types of recreation. Indeed, the sample exhibits an overall average of 2.19 activities per farm. Even more striking though is that over 9% of farms have 5 or more different activities, with a maximum of 19 permanent activities observed on one farm.

Sub-dividing recreational activities according to their category of provision (Figure 5.2) highlights the fact that relatively few farms have multiple types of recreation in one category of provision. However, one distinct pattern does emerge. Nearly 10% of farms with some form of provision open to the general public without booking have 5 or more different types of activities in this category. In contrast, less than 3% of farms with activities available by arrangement or to clubs and syndicates have more than 5 different types of recreation and none have 10 or more different types. This difference is also reflected in the average number of different types of recreation per farm, which is over 2 for provision of 'open to the general public without booking' activities, compared to levels of less than 2 per farm for the other categories. It seems likely that this pattern is indicative of farms which have actively combined several different types of recreation to form a multi-faceted enterprise. A brief examination reveals that the majority of farms where temporary recreational activities had taken place in the previous year had only one temporary activity and, therefore, it appears that these activities are more suited to integration with permanent activities than with one another (confirming the observations derived from Table 5.9).

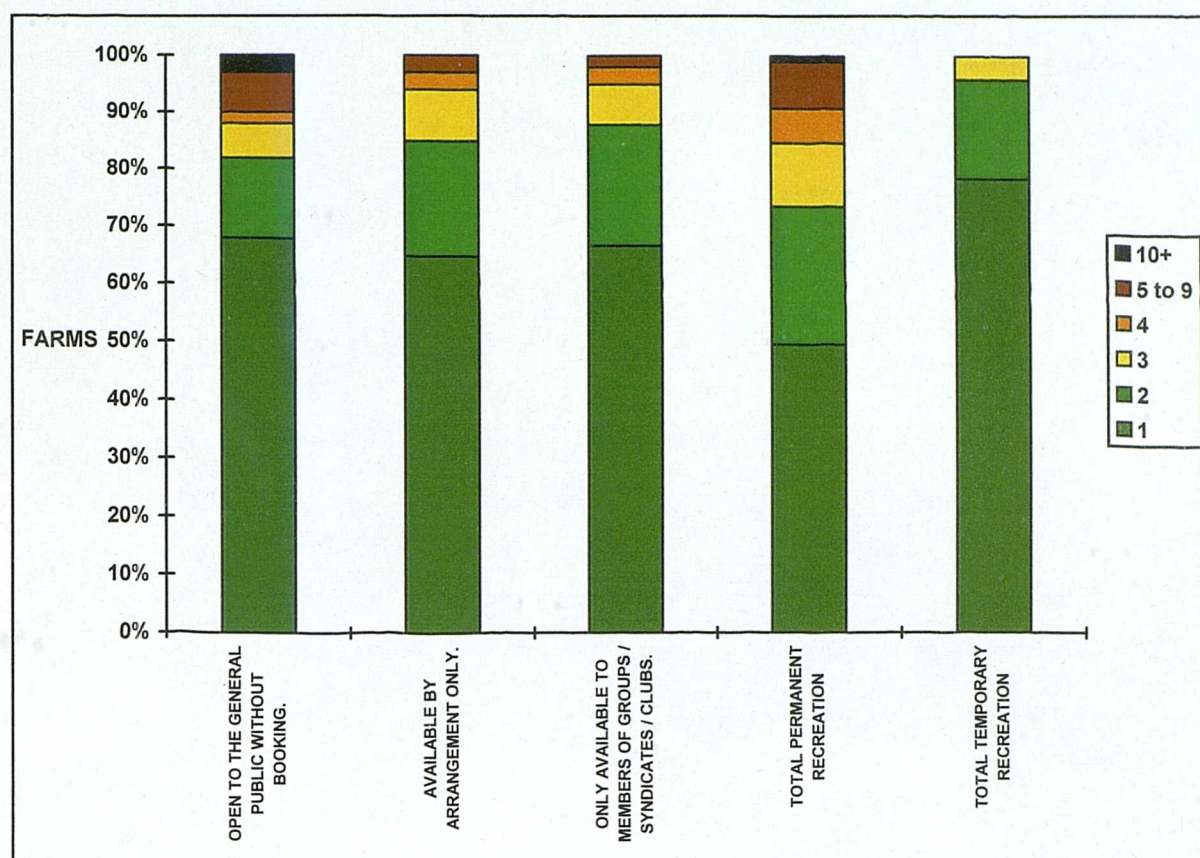


Figure 5.2. The percentage of farms with multiple recreational activities (Total for permanent recreation includes farms with the same type of recreation occurring in two or more categories of provision) (Source: Author's survey).

The idea of the integration of activities is reinforced in Table 5.10 which presents the association between recreation type and farms with more than one recreational activity. The table shows the average number of activities present on farms with each individual type of recreation. It is organised in descending order of average numbers of activities. This indicates the extent to which particular types of recreation are associated with farms with multiple activities. It is clear that certain types of recreation are very strongly associated with farms with high numbers of recreational activities. Picnic sites present a clear example, being associated with farms with an average of 7 recreational activities (in fact, nearly a quarter are located on farms with 10 or more recreational activities). Activities at the top of the table are most strongly associated with farms with multiple types of recreation and are therefore most likely to be found in combination with one another. At the opposite end of the table, village sports pitches, game shooting, access agreements and coarse fishing are the enterprises associated with the lowest average number of activities on farms and are therefore most likely to be found in isolation. This suggests that these activities are least suitable for active integration and do not complement one another in the same way that activities at the top of the table do so.

It is possible to undertake a similar analysis of temporary recreational activities, although in this case the association is between temporary recreation and the mean number of permanent recreational activities on farms (Table 5.11). Once again, the table is arranged in descending order of those events associated with farms with the highest average number of recreational activities. Events at the top of the table are more strongly associated with farms with high numbers of recreational activities, and therefore appear more likely to be part of an integrated multi-faceted enterprise, whereas those at the bottom of the table are associated with farms with low numbers of recreational activities. For example historic battle re-enactments occur on farms with an average of 7.3 permanent recreational activities, whereas school visits occur on farms with an average of only 0.3 permanent recreational activities. It should be remembered that, in this case, the analysis also includes farms with no permanent recreational activities.

RECREATION TYPE	TOTAL NUMBER OF FARMS	MEAN NUMBER OF RECREATIONAL ACTIVITIES PER FARM
Facilities for Farm Birthday Parties.	22	8.7
Adventure Play Area / Children's Play Area.	21	7.5
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	21	7.4
Picnic Site.	33	7
Laid out Farm Trails / Nature Trails / Cycle Trails.	28	7
Catering: Farm Restaurant, Teas, Coffee Shop.	27	6.9
War Games / Paintballing.	13	6.2
Other Types.	12	5.9
Museum.	12	5.8
Open Farm.	73	5.2
Nature Reserve / Country Park / Gardens.	26	4.8
Facilities for Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	31	4.7
Facilities for Models.	30	4.3
Educational Facilities. School Visits, College Visits.	106	4.2
Airfield / Gliding / Parachuting.	9	4
Clay Pigeon Shooting / Gun Club.	105	3.9
Horses for Riding / Trekking / Lessons.	90	3.3
Game Fishing.	70	3.2
Golf Course / Driving Range / Crazy Golf / Pitching.	16	3.2
Facilities for Riding: Gallops, Cross Country Course.	111	3.1
Rough Shooting.	189	3.1
Coarse Fishing.	144	3
Access Agreements.	55	3
Game Shooting.	256	2.6
Village Sports Pitches.	30	2.5

Table 5.10. The association between permanent recreation type and mean number of recreational activities per farm (Source: Author's survey).

RECREATION TYPE	TOTAL NUMBER OF FARMS	MEAN NUMBER OF RECREATIONAL ACTIVITIES PER FARM
Historic Battle Re-enactments.	4	7.3
Machinery Rallies.	15	4.1
Organised Group Visits (Caravan Rallies / Group Camps).	72	2.7
Farm Open Days: Demonstrations, Working Farm Tours, Tractor Rides, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	189	2.5
Sheep Dog Trials/Demonstrations.	21	2.5
Motor Sport Events.	40	2.4
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	50	2.3
Concerts / Fairgrounds / Circus.	12	2.1
Ploughing Matches.	32	1.8
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	5	1.6
Other Types.	2	1.5
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	20	1
School Visits, College Visits.	13	0.3

Table 5.11. The association between temporary recreation type and the mean number of permanent recreational activities on farms (Source: Author's survey).

5.2. The Inter-County Distribution of Farm-Based Recreation.

This section of the discussion presents results geographically according to the eight county study areas. They relate to the incidence of recreation in three ways: overall; by category of provision; and by type of provision. This provides an invaluable context to the discussion in section (5.3) which examines each county study area in detail.

(i). *THE INTER-COUNTY PICTURE BY CATEGORY OF PROVISION.*

The incidence of recreational activities varies markedly between the eight study areas (Table 5.12). Kent (46%) and Hertfordshire (44%) exhibit the highest incidence of responding farms having some form of recreational activity. Both were selected as 'high population demand' counties. Kent was also classified as a 'high tourist demand' county, whereas Hertfordshire was a 'low tourist demand' county (See Table 5.13 and Chapter 4). It appears that this high 'population demand' is reflected in a high level of provision of recreational activities. At the opposite end of the spectrum, the lowest level (23%) is found in the county of Gwynedd which was identified as a 'high tourism-low population demand' county. In this case, it appears that the seasonal tourist demand alone does not promote a high level of recreational provision on farms in this area. The remaining counties of Durham and

Cheshire are slightly below this mean and Gloucestershire, Leicestershire and Humberside are slightly above. This pattern is somewhat surprising given the relative positions of these counties in Table 5.13. In particular, the county of Cheshire, with a high population demand, exhibits a lower incidence of recreation than might be expected and Humberside, classified as a 'low-low' county, a higher level. It must be remembered, of course, that the primary criteria for selecting the county study areas were their agricultural characteristics which will provide important explanations for these differences and are explored in more detail later (see Chapter 9).

	STUDY AREAS								
	GWYN	HUMB	DURH	CHES	LEIC	GLOU	HERT	KENT	TOTAL
TOTAL NUMBER OF RESPONDING FARMS	250	268	269	234	244	291	269	274	2099
TOTAL NUMBER OF FARMS WITH PERMANENT RECREATIONAL ACTIVITIES	58	73	74	75	93	111	119	125	728
% OF RESPONDING FARMS WITH PERMANENT RECREATIONAL ACTIVITIES	23	27	28	32	38	38	44	46	34
ADJUSTED FOR NON-RESPONSE	19	24	25	30	30	34	41	42	31

Table 5.12. The incidence of recreational activities in the study area counties (Source: Author's survey).

		Tourist Demand	
		Low	High
Population Demand	Low	Durham Humberside	Gloucestershire Gwynedd
	High	Leicestershire Hertfordshire Cheshire	Kent

Table 5.13. Relative levels of demand in the county study areas (see 4.1 (iv)).

Disaggregating the distribution of recreation according to the category of provision (Table 5.14) reveals remarkably little deviation from the overall pattern of distribution. The only notable case is that of Gwynedd which exhibits the third highest level of recreational facilities open to the public without booking in contrast to its position of having the lowest overall total of recreational activities. This reflects the seasonal and tourist nature of demand in this area. Generally, though, the incidence of different categories of recreation reflects the overall level of demand for recreation in an area and is not strongly associated with either demand from tourists or local residents. A similar pattern to the overall one is also evident for temporary recreational activities. Most surprising is the way in which recreation for personal use mirrors this overall pattern. A similar proportion might have been expected

throughout the sample, reflecting a relationship between stage in the family life cycle and the provision of recreation for personal use. Two factors seem to be at work here. First, farms located in areas of high demand are more likely to have both recreation for personal use and other forms of recreational provision. Indeed, the two can be complementary and closely linked. A personal interest can develop into a more widely available facility, or alternatively the provision of a facility may encourage personal use. Secondly, the occurrence of recreation for personal use will reflect the suitability of the farm, in terms of the agricultural system, for the provision of recreational activities. This is an important factor as in the case of nearly half of the farms with recreation for personal use this was the only form of recreation provided on these farms. Agricultural characteristics, such as agricultural systems compatible with game shooting, may help to explain the relatively high levels of recreation for personal use in Humberside and Durham.

	% OF RESPONDING FARMS								
	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	MEAN
RECREATION OPEN TO THE PUBLIC WITHOUT BOOKING	10	5	7	9	11	8	11	7	9
RECREATION AVAILABLE BY BOOKING ONLY	8	10	12	17	21	18	22	10	15
RECREATION FOR CLUBS/GROUPS/SYNDICATES	10	19	19	20	31	23	30	17	21
TOTAL FARMS WITH PERMANENT RECREATION	23	28	32	38	46	38	44	27	34
AVERAGE NUMBER OF PERMANENT ACTIVITIES PER FARM	2.1	2.2	1.9	1.9	2.7	1.9	2.4	2.2	2.2
TEMPORARY RECREATIONAL ACTIVITIES	11	11	12	18	23	25	28	14	18
RECREATION FOR PERSONAL USE	11	29	25	33	38	29	44	37	31

Table 5.14. The incidence of recreational activities in the study area counties (Source: Author's survey).

(ii). THE INTER-COUNTY PICTURE BY TYPE OF PROVISION.

Having presented the distribution of recreation, both overall and by category of provision, it is appropriate to move on and examine the distribution of individual types of recreation between the county study areas. This employs the LQ statistic (see Chapter 4) which indicates relative specialization in different types of recreation between the county study areas (Tables 5.15 'permanent recreation' and 5.16 'temporary recreation'). This is based on the numbers of responding farms with recreation and so, in part, reflects the overall pattern of the differing proportions of farms in each county having recreation (Highlighted in 5.2 (i)). LQ values are easier to interpret than equivalent percentage figures which require

reference to the sample mean and to further aid clarity, the tables are also arranged in descending order of the total incidence of recreation.

A brief examination of tables 5.15 and 5.16 reveals distinct differences in the specialization of specific types of recreation between the study area counties, although the degree of specialization broadly mirrors the overall differences in recreational provision between the counties. For example, Kent, which exhibits the highest proportion of farms with recreation in the sampled counties, also exhibits a relative specialization in the provision of all types of recreation (Table 5.15). In contrast, the county of Gwynedd is only specialized in the provision of 9 of the 25 different types of recreation, reflecting the low proportion of farms with recreation in the area. Inevitably, some types, such as rough shooting, exhibit a relatively even degree of specialization between counties, with only farms in Kent being strongly specialized in this activity. However, other types, such as picnic sites, are strongly specialized in some counties and under-specialized in others. A discussion of each individual type of recreation would be time-consuming and ultimately unproductive. Instead, it is more useful to focus on those types of recreation which do not mirror the overall pattern of recreational provision and are, therefore, the 'exceptions to the rule'. Hence, there is a particular focus in the following discussion on those types which are over-specialized in counties which overall are under-represented in recreational provision and conversely those types which are under-specialized in counties which are over-represented.

For counties having both low population and low tourism demand, farms in the county of Durham are more likely to have game fishing relative to the other counties in the sample, reflecting suitable riparian resources in this area. Farms with recreation in the county of Humberside are more specialized in village sports pitches, although the reasons for this are unclear. Gwynedd exhibits the most strongly bi-polar specialization of all the counties in different types of recreation. Tourist activities, such as catering, laid-out farm trails, picnic sites and temporary activities such as sheep dog trials, all exhibit a high degree of specialization on farms with recreation in the area. Many types of recreation widely distributed throughout the rest of the sample, especially equestrian and coarse fishing activities, are under-represented. This suggests that these activities are more strongly associated with demand from resident populations than tourists. Interestingly, in Gloucestershire, which was also identified as a high tourist and low population demand county, these tourist activities are far less evident. Clearly, tourist demand does not appear to be the dominant factor influencing the provision of recreation.

For counties with a high population demand and low tourist demand (Leicestershire,

Hertfordshire, and Cheshire Table 5.13), there appear to be relatively few similarities between the types of recreation found on farms. This again reinforces the importance of agricultural characteristics in the provision of different types of recreation. Coarse fishing, game fishing, caravan rallies and riding events are particularly strongly specialized on farms with recreation in Cheshire, whereas motor sport and game shooting are under specialized. In contrast, motor sport is very highly specialized on farms with recreation in Hertfordshire, whereas there is a paucity of laid-out farm trails and sheep dog trials in this county. This perhaps reflects a high demand for motor sport in the urban fringe. The low levels of sheep dog trials correspond to the low sheep population in the county, but the low level of trails is a surprise. In Leicestershire, horses for riding and access agreements are more likely to be found on farms. Finally, farms with recreation in the county of Kent (high tourist and high population demand) are more likely to have tourist type activities similar to those found in Gwynedd. Coarse fishing and open farms are also well-represented on farms with recreation in Kent. Overall, however, no types are under-specialized in Kent, confirming its position in Table 5.13.

There are two interesting comparisons which can be made at this point which highlight the fact that just as the predominant type of demand in an area does not appear to be strongly related to specific types of recreation, neither are agricultural factors and specific types of recreation. This is illustrated when comparing the recreation profiles of the counties of Gwynedd and Durham and similarly the counties of Hertfordshire and Humberside, both selected from the same clusters based on their agricultural characteristics. In both cases, there appear to be more differences than similarities between specialization in types of recreational provision. Clearly, the provision of specific types of recreation is a multi-faceted outcome which is related to both supply and demand factors, and also wider regional or local recreational traditions and tastes, and is not dependent on any one broad set of variables. This questions further the validity of previous research which has treated recreation as a single phenomenon. It emphasizes the need for detailed farm-level investigation in preference to the reductionism of classification employed by previous work and illustrates a key advantage of employing a postmodern informed conceptual framework (Chapter 3). This observation leads logically onto the next section where an 'intra-regional' element is introduced to the discussion.

RECREATION TYPE	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	TOTAL (N)
Game Shooting.	0.6	0.9	0.3	0.9	1.2	1.0	1.6	1.3	256
Rough Shooting.	0.9	0.9	0.7	0.8	1.5	0.9	1.2	1.0	189
Coarse Fishing.	0.4	1.0	1.5	1.0	1.8	0.7	0.8	0.7	144
Facilities for Riding: Gallops, Cross Country Course.	0.2	0.5	1.0	0.9	1.6	1.5	1.7	0.5	111
Educational Facilities.	0.6	0.6	0.7	0.8	1.7	1.6	1.4	0.5	106
Clay Pigeon Shooting / Gun Club.	0.3	0.9	0.4	1.1	1.6	1.0	2.1	0.6	105
Horses for Riding / Trekking / Lessons.	0.3	0.7	0.7	1.4	1.4	1.2	1.6	0.6	90
Open Farm.	0.3	0.7	0.4	0.2	1.9	1.5	2.0	0.8	73
Game Fishing.	0.6	1.8	1.2	0.4	1.4	0.4	1.3	0.9	70
Access Agreements.	1.5	0.3	0.7	1.4	1.4	0.8	0.9	1.0	55
Picnic Site.	1.5	0.2	0.9	0.5	2.1	0.6	1.0	1.1	33
Motor Sport.	0.5	0.7	0.2	1.0	1.0	0.7	3.6	0.3	31
Village Sports Pitches.	1.1	0.3	0.8	0.7	2.0	0.9	0.5	1.7	30
Facilities for Models.	0.0	1.0	0.3	1.0	1.2	1.2	1.9	1.4	30
Laid out Farm Trails / Nature Trails / Cycle Trails.	1.2	0.8	0.6	0.8	2.5	0.5	0.6	1.0	28
Catering: Farm Restaurant, Teas, Coffee Shop.	1.2	0.6	0.9	0.9	2.3	0.3	0.9	1.0	27
Nature Reserve / Country Park / Gardens.	1.6	1.2	0.3	0.0	2.3	0.8	1.0	0.7	26
Facilities for Farm Birthday Parties.	1.1	0.7	1.4	0.7	1.3	0.0	1.8	1.2	23
Adventure Play Area / Children's Play Area.	1.2	0.4	1.5	0.4	2.5	0.7	0.8	0.4	21
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	0.8	0.0	1.9	0.4	2.2	0.3	1.2	1.3	21
Golf Course / Driving Range.	0.4	0.0	0.8	1.6	1.6	0.4	1.8	1.4	16
War Games / Paintballing.	0.0	0.6	0.0	0.6	1.2	1.1	4.5	0.0	13
Museum.	0.0	0.0	0.0	1.2	4.1	0.5	1.3	0.7	12
Other Types.	1.4	0.0	1.3	0.0	1.9	0.0	2.8	0.7	12
Airfield/Gliding.	0.0	1.7	0.0	0.0	1.7	0.8	1.9	2.0	9

Table 5.15. The LQ values of permanent recreation, by type, between the study area counties (Source: Author's survey).

RECREATION TYPE	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	TOTAL (N)
Farm Open Days: Demonstrations, Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	0.6	0.5	0.5	0.6	1.6	1.4	1.9	0.9	189
Caravan Rallies / Group Camps.	0.7	0.3	1.0	1.2	1.3	1.3	1.4	0.7	72
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	0.2	0.5	1.1	0.9	1.4	0.9	1.8	1.2	50
Motor Sport.	0.2	1.0	0.6	1.0	0.6	1.8	2.7	0.0	40
Ploughing Matches.	0.0	0.5	0.5	0.2	1.4	1.7	2.5	1.1	33
Sheep Dog Trials.	3.2	1.1	0.0	1.1	1.1	1.0	0.0	0.4	21
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	0.4	1.6	0.8	1.5	1.1	0.7	0.4	1.3	20
Machinery Rallies.	0.6	1.0	0.0	0.0	2.0	1.0	1.1	2.4	15
School Visits, College Visits.	1.9	1.2	0.6	0.6	0.6	0.5	1.3	1.4	13
Concerts / Fairgrounds / Circus.	2.1	0.0	0.7	0.6	0.6	1.8	1.4	0.7	12
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	0.0	0.0	0.0	1.5	0.0	1.4	3.3	1.8	5
Historic Battle Re-enactments.	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	4

Table 5.16. The LQ values of temporary recreation, by type, between the study area counties (Source: Author's survey).

5.3. THE INTRA-COUNTY DISTRIBUTION OF FARM-BASED RECREATION.

The basic indicators presented in 5.1 and 5.2 provide very little context to the general non-agricultural constraints and opportunities of each area. They certainly cannot account for intra-county variations in these factors. To address these issues, this part of the analysis provides a contextual discussion of the distinctive characteristics of the farming system and the demand for recreational activities in terms of tourism and the indigenous population of each county (Table 5.17 contextualises some basic population and agricultural statistics for each county, with England and Wales provided for comparison). This is integrated with detailed intra-county analysis based on thematic mapping of permanent and temporary recreation, excluding recreation for personal use, using postcode sectors. Along with Tables 5.18, 5.19, 5.20 and 5.21 these data serve to highlight the incidence of the main category-types of recreation within each county. The 'breaks' in the LQ values employed in the thematic mapping are selected to illustrate relative specialization within each county. In all cases, the value of 1.0 is retained as an inflection point to illustrate over and under-specialization within each county as a whole. It should be noted that the divisions used in the mapping of the categories of recreation emphasize postcode sectors which are highly specialized in recreational provision. This is important because there are relatively low

numbers of farms with each category of provision in each county and, as a result, recreation is not present in every sector. Consequently, it is necessary to focus on the relative degree of specialization within those sectors.

	GWYN	DURH	HERTS	HUMB	KENT	GLOU	LEIC	CHES	EW
SIZE (SQ KM)	3863	2429	1639	3508	3735	2653	2551	2331	151189
POPULATION DENSITY (PERSONS PER SQ KM)	62	250	607	251	412	204	354	415	339
FARM SIZE (% OF AGRICULTURAL AREA)									
UNDER 20 HA	6.0	3.8	4.2	3.1	6.6	6.1	4.9	9.6	5.8
20-99 HA	30.8	34.1	17.6	22.4	26.4	32.2	31.7	59.4	33.6
100-299 HA	36.1	39.2	42.6	46.2	35.8	35.1	40.9	25.2	36.6
300 HA+	27.1	22.9	35.5	28.3	31.2	26.6	22.5	5.8	24.0
FARM TYPE (% OF AGRICULTURAL AREA)									
DAIRYING	5.6	8.4	2.5	1.6	3.7	18.4	11.9	50.3	15.6
CATTLE AND SHEEP	86.4	48.2	4.9	1.4	10.9	16.4	15.0	17.4	28.6
CROPPING	0.6	24.3	72.3	82.7	54.5	36.8	48.1	13.3	36.9
PIGS AND POULTRY	0.3	0.4	0.5	1.2	0.9	0.6	0.5	0.9	0.8
HORTICULTURE	0.1	0.1	0.5	0.4	9.6	0.8	0.3	1.0	1.0
MIXED AND OTHER TYPES	7.0	18.7	19.4	12.7	20.5	27.0	24.2	17.1	17.1

Table 5.17. Basic agricultural and population characteristics of the study area counties (Source: OPCS 1994 and MAFF 1994).

The figures in the following tables represent the percentage of farms in each category of provision, in each county, with each particular type of recreation. As such they indicate the relative specialization in each type of recreation rather than the absolute incidence of recreation in the county. The pattern of recreation in each county will now be discussed using these sets of information.

RECREATION OPEN TO THE PUBLIC BY TYPE	% OF FARMS IN EACH COUNTY								FARMS (N)
	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	
Access Agreements.	40	7	21	32	20	9	19	24	40
Coarse Fishing.	16	37	32	20	23	9	11	30	37
Picnic Site.	24	7	16	4	30	4	7	18	26
Laid out Farm Trails / Nature Trails / Cycle Trails.	16	7	11	12	30	9	4	18	25
Horses for Riding / Trekking / Lessons.	8	30	16	20	3	17	15	6	24
Catering: Farm Restaurant, Teas, Coffee Shop.	16	15	16	8	23	4	7	18	24
Educational Facilities.	16	15	27	4	10	4	4	12	19
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	8	0	27	0	20	4	7	18	19
Nature Reserve / Country Park / Gardens.	20	15	0	0	23	9	4	6	18
Open Farm.	8	15	21	0	17	4	7	12	18
Golf Course / Driving Range.	4	0	11	16	10	4	11	6	15
Adventure Play Area / Children's Play Area.	12	0	16	4	17	0	4	6	14
Facilities for Farm Birthday Parties.	12	7	16	0	10	0	4	12	13
Facilities for Riding: Gallops, Cross Country Course.	4	7	16	0	3	9	11	0	11
Clay Pigeon Shooting / Gun Club.	4	15	0	12	0	0	19	0	11
Game Fishing.	4	15	11	4	0	4	7	0	9
Village Sports Pitches.	8	0	0	0	3	9	4	18	9
Motor Sport.	8	7	0	0	0	4	15	0	8
Rough Shooting.	8	22	5	4	0	0	0	0	7
Museum.	0	0	0	4	17	0	0	0	6
Game Shooting.	4	15	0	8	0	0	0	0	5
Airfield/Gliding.	0	7	0	0	3	0	4	12	5

Table 5.18. The intra-county percentage of farms with recreational provision open to the public without booking (by type) (totals do not sum to 100% because of farms with multiple types of recreation) (Source: Author's survey).

RECREATION AVAILABLE BY ARRANGEMENT BY TYPE	% OF FARMS IN EACH COUNTY								FARMS (N)
	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	
Rough Shooting.	43	29	24	23	34	26	25	32	92
Educational Facilities.	19	21	12	21	31	43	25	16	83
Facilities for Riding: Gallops, Cross Country Course.	5	7	21	15	15	17	18	12	48
Open Farm.	5	14	0	4	20	22	20	20	47
Horses for Riding / Trekking / Lessons.	5	4	15	17	12	17	20	12	45
Clay Pigeon Shooting / Gun Club.	10	11	3	15	15	11	21	16	44
Game Shooting.	19	25	3	4	5	11	11	24	35
Coarse Fishing.	10	4	12	4	10	6	4	16	24
Motor Sport.	0	7	0	6	3	2	14	0	16
Game Fishing.	5	21	0	0	2	4	2	12	14
Access Agreements.	0	4	3	4	3	7	2	8	13
Facilities for Models.	0	0	0	6	5	4	0	8	10
Facilities for Farm Birthday Parties.	0	4	3	4	2	0	7	0	9

Table 5.19. The intra-county percentage of farms with recreational provision available by arrangement (by type) (Source: Author's survey).

RECREATION FOR CLUBS, GROUPS OR SYNDICATES BY TYPE	% OF FARMS IN EACH COUNTY								FARMS (N)
	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	
Game Shooting.	55	44	18	46	46	46	60	82	219
Rough Shooting.	40	24	14	16	21	13	19	35	93
Coarse Fishing.	8	26	37	24	26	13	12	5	89
Facilities for Riding: Gallops, Cross Country Course.	4	8	10	13	16	19	15	10	59
Clay Pigeon Shooting / Gun Club.	4	14	8	9	16	13	13	7	53
Game Fishing.	12	18	18	5	14	1	11	10	49
Horses for Riding / Trekking / Lessons.	0	8	2	7	11	4	5	5	27
Facilities for Models.	0	8	2	2	2	4	8	7	20
Village Sports Pitches.	4	0	4	4	7	3	1	2	15

Table 5.20. The intra-county percentage of farms with recreational provision for clubs, groups or syndicates (by type) (Source: Author's survey).

TEMPORARY RECREATION TYPE	% OF FARMS IN EACH COUNTY								FARMS (N)
	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERT	HUMB	
Farm Open Days: Demonstrations, Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	50	37	33	30	61	51	60	58	189
Caravan Rallies / Group Camps.	22	10	27	22	19	17	17	18	72
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	4	10	21	12	14	8	16	21	50
Motor Sport.	4	17	9	10	5	13	18	0	40
Ploughing Matches.	0	7	6	2	9	11	14	12	33
Sheep Dog Trials.	29	10	0	6	5	4	0	3	21
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	4	14	6	8	5	3	1	9	20
Machinery Rallies.	4	7	0	0	6	3	3	12	15
School Visits, College Visits.	11	7	3	2	2	1	3	6	13
Concerts / Fairgrounds / Circus.	11	0	3	2	2	4	3	3	12
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	0	0	0	2	0	1	3	3	5
Historic Battle Re-enactments.	0	0	0	0	6	0	0	0	4

Table 5.21. The intra-county percentage of farms with temporary recreational provision (by type) (Source: Author's survey).

(i). GWYNEDD.

The county of Gwynedd ceased to exist officially on 1st April 1996 when the eight counties (and 37 districts) of Wales were replaced by 22 Unitary Authorities. The old county of Gwynedd is now divided between three Authorities (Gwynedd, Isle of Anglesey and Conwy - the first two of which are wholly within the original county boundary, whilst the latter straddles the eastern boundary of the original county with Clwyd). The county of Gwynedd is the largest county studied and it also has the lowest population density (less than one third of that of its nearest rival, Gloucestershire Table 5.16). It is possible to divide the county into two distinct components: a lowland (coastal and valley) fringe and an upland dome.

The coastal and valley fringe consists of a narrow northern coastal strip, the Isle of Anglesey and the Llyn Peninsula in the north-west and the Vale of Conwy which forms a valley to the east of the upland dome. It is within these areas that the only major settlements are located: Llandudno and Conwy in the extreme north-east at the head of the Vale of Conwy; Holyhead (the largest urban centre), in the extreme north-west of the Isle of Anglesey; Bangor and Caernarvon on the north-west mainland coast, Pwllheli and Porthmadog on the south of the Llyn Peninsula, and Dolgellau in the south. The major access to the area (A55), especially

from Chester, Liverpool and Manchester, is located along the northern coast.

The majority of the upland dome falls within the Snowdonia National Park, the second largest National Park in England and Wales, which encompasses 2142 km² of mountainous massif including Mount Snowdon, the highest peak in England and Wales. It is not the most visited National Park, yet Snowdonia still attracted 9.5 million visitor days in 1992 (Countryside Commission 1992:9). In addition to the wild and rugged landscape of the National Park, almost the whole coastline (215 km²) of the Isle of Anglesey is designated as an Area of Outstanding Natural Beauty (AONB), as is 155 km² of the Llyn Peninsula (which is also an Environmentally Sensitive Area - ESA). Parts of these coastlines are further designated as Heritage Coasts. North Wales and Anglesey, in particular, are well established tourist destinations and the increasing growth of outdoor pursuits means that the National Park remains an important focus for recreational activities. The Tir Cymen pilot stewardship scheme is operated by the Countryside Council for Wales in the southern half of the National Park and includes the promotion of access agreements. Farm-based accommodation is highly developed in the area (Evans 1990), whilst farm attractions are represented by the North Wales FAG which was formed in 1993 (Ilbery 1996).

These upland and lowland components are reflected by their agriculture. The coastal and valley fringe is grade 3 and 4 land in about equal proportions, while the upland dome is almost exclusively grade 5 land and includes areas highly marginal for agriculture (MAFF 1976). The agricultural production of Gwynedd is dominated by cattle and sheep (over 86% of the land area), whilst dairying also features but is restricted to the milder parts of the coastal and valley fringe. A mixture of farm sizes is evident, reflecting the smaller coastal and larger upland holdings. In recognition of the marginal nature of the area, the whole of the county of Gwynedd was designated as a EU Objective 5b region (1994-1999) (MAFF 1995). Under this designation, funding is available from European structural funds for assisting the development of rural areas. This includes the marketing, development and promotion of farm tourism.

Postcode mapping reveals that recreation in the county is most strongly associated with farms located in the coastal and valley fringes (Figure 5.3), in particular along the north-eastern coast of Anglesey and part of the western coast close to Holyhead. Notably, recreation is absent from many of the responding farms on the Isle of Anglesey, perhaps reflecting a specialization in accommodation facilities, and especially camping and caravan sites in the area (Evans 1990). Elsewhere, recreational provision is clustered around the major road access through the Llyn Peninsula and particularly the settlements of

Caernarfon in the north and Porthmadog in the south. A slight specialization is also evident around the valley fringe to the east, together with the settlement of Betws-y-Coed. There is a stronger specialization in the area around Dolgellau in the south. The one notable sector without responding farms corresponds to the most mountainous part of the Snowdon range where there are likely to be very few farms anyway. Farms appear to be relatively less specialized in recreation in the less accessible areas, as demonstrated by those located at the tip of the Lleyn Peninsula.

This aggregate picture disguises significant variations between categories of provision (Figure 5.4). The pattern becomes more polarised and distinct differences in the distribution of the categories of provision emerge. The distribution of activities 'open to the public' is mainly concentrated in the accessible coastal areas and especially in the southern part of the county. Intra-county analysis (Table 5.18) reveals that access agreements, farm trails, coarse fishing, farm catering, educational facilities and nature reserves are the most abundant types of this category of provision in the area. Rough shooting is the dominant type of recreation available by arrangement in the area, although game shooting and educational facilities are also important. Farms with this category of provision are more evenly distributed throughout the county, with the slight bias towards the southern part of the county reflecting the greater suitability of this more accessible and less mountainous area to this category of recreational provision. These activities are very strongly associated with the major settlements in the area.

The pattern pertaining to temporary recreation is particularly revealing. This category of provision is absent throughout much of the county and is strongly associated with the coastal fringe, the road network and settlements. Farm open days, sheep dog trials and organised group events are the most widely occurring type of temporary recreation in the county and represent activities which are particularly compatible with the tourist trade in the area and may also provide social entertainment of the farming community itself, as with sheepdog trials. Recreation for clubs, groups and syndicates is far more widespread, including much of the more remote and mountainous land. This is almost certainly associated with the very high levels of game and rough shooting in the county and the suitability of much of this terrain for these purposes.

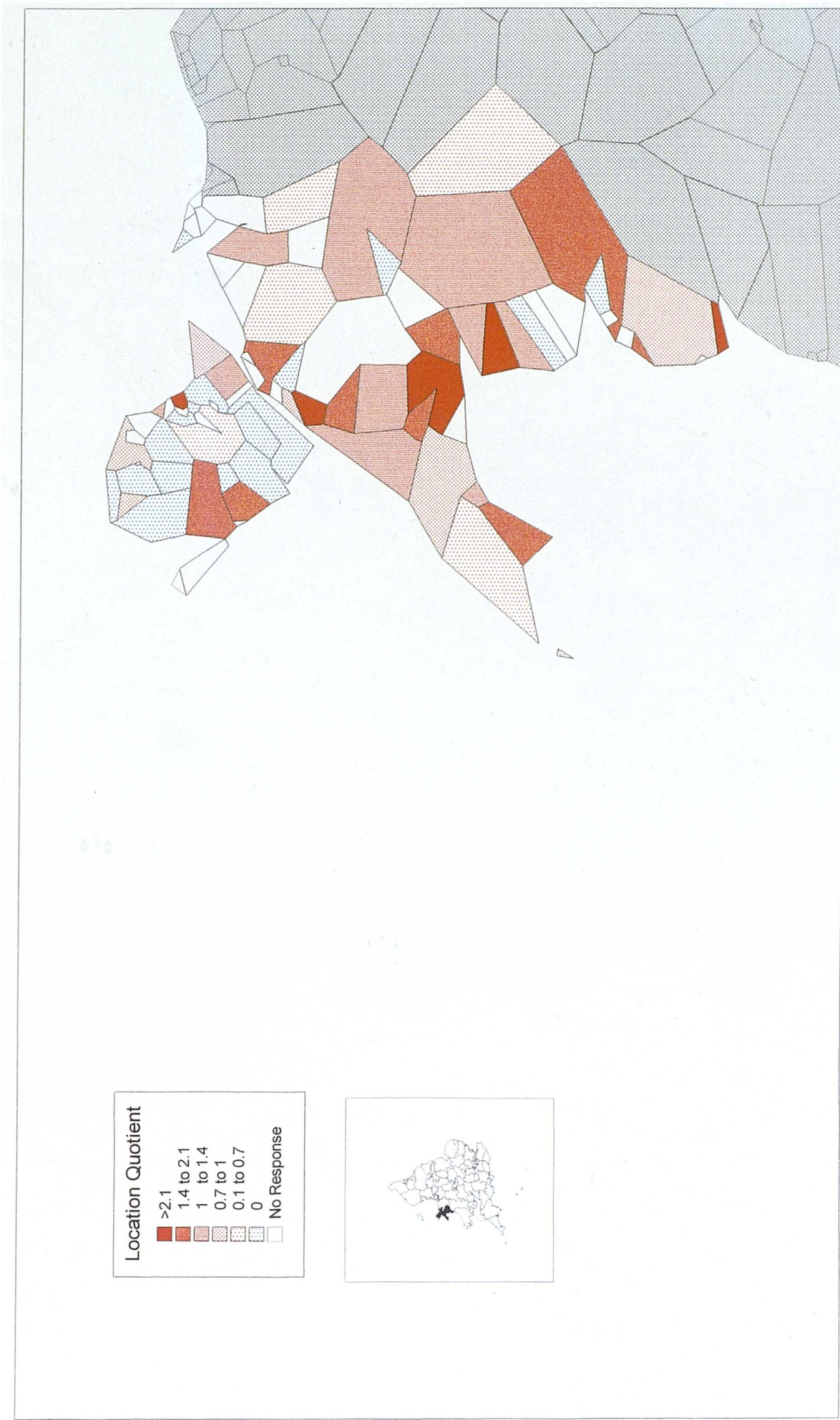


Figure 5.3. Specialization in recreational provision, by postcode sector, in the county of Gwynedd. Scale 1cm:8km. (Source: Author's survey).



Figure 5.4. Specialization in different categories of recreational provision, by postcode sector, in the county of Gwynedd. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:17km. (Source: Author's survey).

(ii). DURHAM.

The county of Durham in the North-East of England has a small coastal frontage sandwiched between the major conurbations of Teeside and Tyneside. From this narrow coastal strip, the county widens and stretches inland to the watershed of the Pennine Mountains and the border with Cumbria in the west, Northumberland in the north and North Yorkshire in the south. Despite its proximity to large centres of population, the county of Durham has a low population density, with all the notable settlements concentrated in the eastern half of the county. These include Seaham and Peterlee on the coast, Darlington and Bishop Auckland in the south, and Durham and Consett in the north.

A similar divide can be observed agriculturally. The eastern half of the county is predominantly grade 3 agricultural land supporting mainly cropping but also some dairy and mixed holdings, whereas in the western half of the county, which is mainly grade 4 and 5 agricultural land, sheep and cattle are more important and dairying is associated with the lower lying ground (MAFF 1976). Grouse shooting on heather moorland is found on large estates (See Wilson 1992). Farm sizes reflect this mixed pattern of production and are similar to the average for England and Wales. The eastern part of the county includes approximately one third of the North Pennines AONB and part is also designated as the Pennine Dales ESA. The whole county was designated as either EU Objective 2 (1994-1999) or 5b (1994-1999) regions. Under this designation, funding was available from European structural funds for assisting development, including the marketing, development and promotion of farm tourism (See Bowler *et al* 1996).

The relative specialization of recreation in the county exhibits an indistinct pattern from postcode mapping of respondents (Figure 5.5). Although a slightly higher proportion of farms in the more populated eastern part of the county appear to have some form of recreation, overall it is fairly evenly distributed throughout the county. Disaggregated by category of recreational provision, the picture becomes somewhat clearer (Figure 5.6). Farms with recreation open to the public without booking are few in number and, therefore, highly concentrated in a small number of postcode sectors. The sectors themselves are scattered across the county and are located in both the populated eastern side and the upland western side, reflecting a small number of farms which have made a large commitment to recreational provision. Recreation available by arrangement in County Durham predominantly consists of rough shooting, game shooting, game fishing and educational facilities and is more strongly evident in the south. Game fishing in particular is

a very traditional activity in the area, taking place on many tributaries of the rivers Tyne and Tees. Recreational provision for clubs, groups and syndicates exhibits a more even distribution throughout much of the county. Game shooting, rough shooting and coarse fishing are the most important types of recreation of this provision reflecting the association between these types and estates in the county (see Winter *et al* 1996) (Table 5.20).

(iii). CHESHIRE.

The county of Cheshire, located on the Welsh border of the north-west of England, is the second smallest county study area but has the second highest population density (Table 5.14). In addition, the large conurbations of the adjacent counties of Merseyside and Greater Manchester to the north promote a very high demand for recreation, but this is tempered by the fact that much of the northern part of the county is designated as green belt, thereby restricting development possibilities on farms. The historic county town of Chester is located in the west, whilst the towns of Ellesmere Port, Runcorn, Widnes and Warrington are found along the county's northern boundary. This area was also designated as an EU Objective 2 (1994-1999) region. Elsewhere, Macclesfield in the east and Crewe in the south are the other major population centres.

Agriculturally, Cheshire is dominated by dairying, with this mode of production accounting for over 50% of the agricultural land in the county in 1991. Cattle and sheep and mixed holdings are the other main types of production. Cropping exhibits the second lowest level of the 8 county study areas, with only Gwynedd having a lower level. The predominance of dairying is reflected in the pattern of farm size in the county. Holdings in the 20-99 ha bracket, quite typical for small to medium sized dairy farms, account for nearly 80% of the agricultural area. Holdings under 20 ha are also well represented, reflecting the high number of small holdings and hobby farms in this area associated with the urban fringe (Bryant *et al* 1982). In the extreme east, the county includes a small part of the Peak District National Park which is mainly upland grazing (grade 4 and 5) (MAFF 1976).

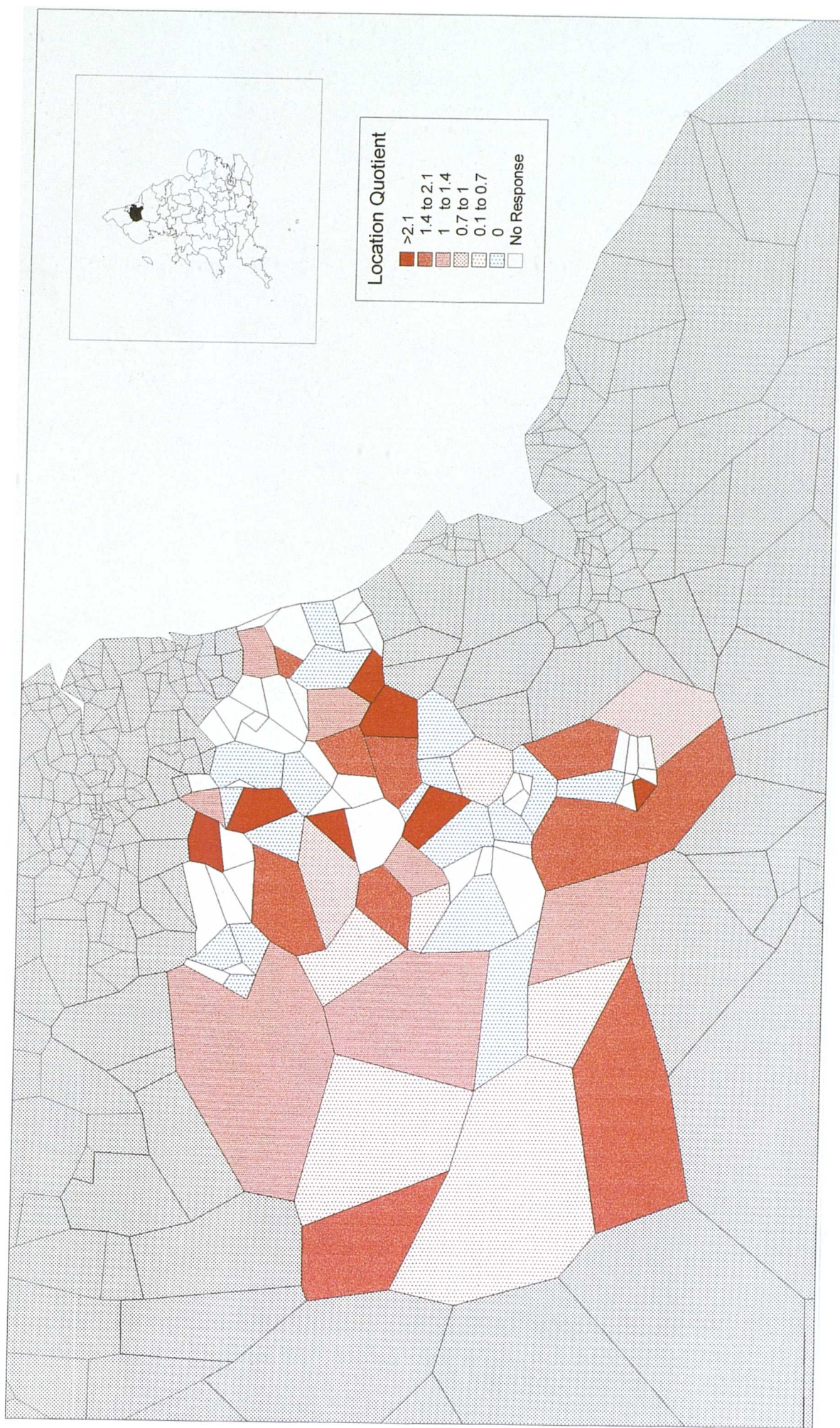


Figure 5.5. Specialization in recreational provision, by postcode sector, in the county of Durham. Scale 1cm:5.1km. (Source: Author's survey).

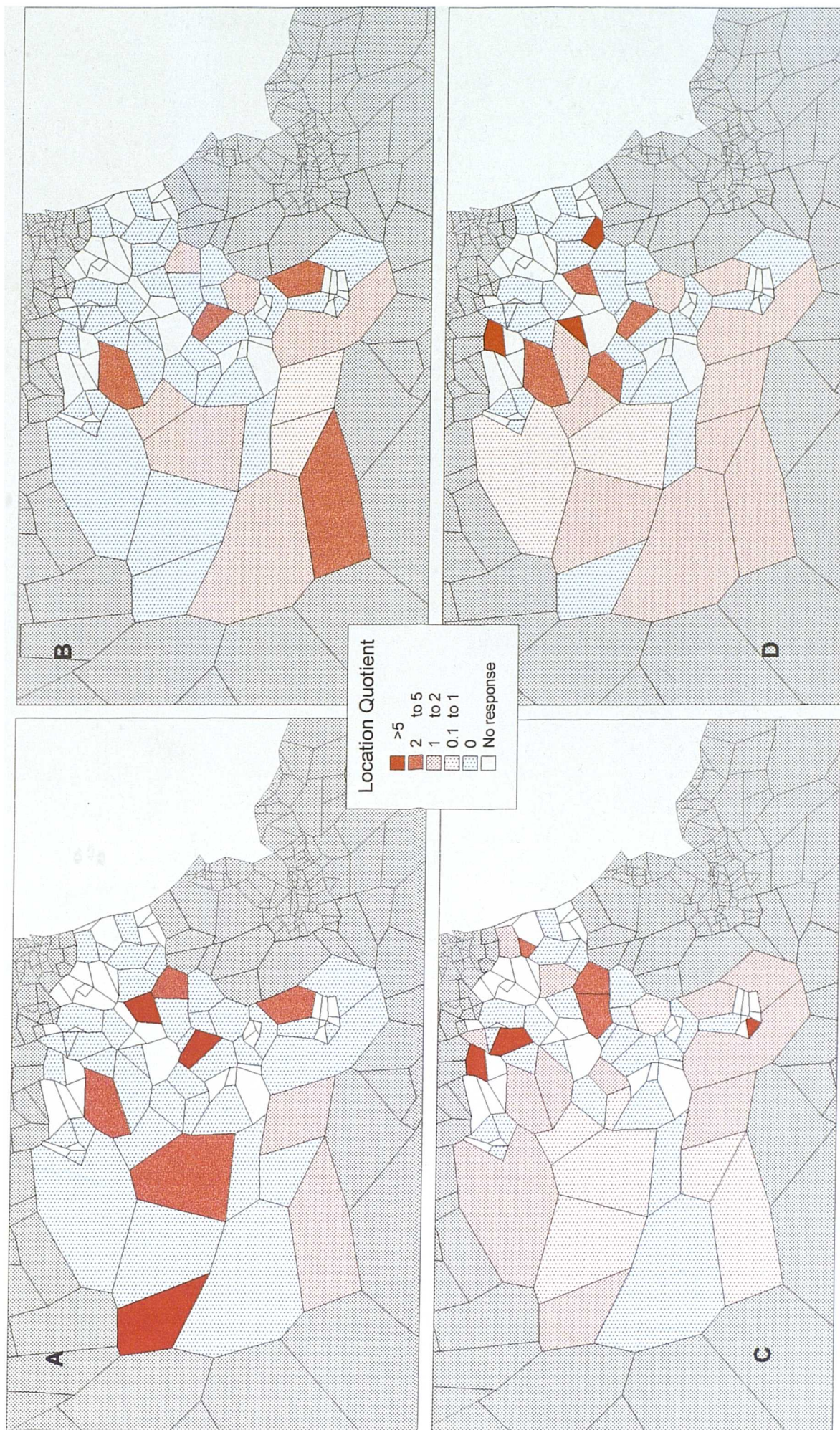


Figure 5.6. Specialization in different categories of recreational provision, by postcode sector, in the county of Durham. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:8.1km. (Source: Author's survey).

Intra-county mapping reveals the central and south-eastern areas to be the most specialized in recreational provision (Figure 5.7). Elsewhere in the county, some sectors on the Manchester fringe are well represented. A notable outlier occurs to the south-east of Manchester which illustrates one of the problems of using the BT Database. Although listed within the entries for the county of Cheshire, these holdings are actually outside the county.

An examination of the results for the individual categories (Figure 5.8) shows a distinct specialization in recreational provision open to the public without booking. It is concentrated in a band across the northern part of the county, along the Merseyside/Manchester fringe (but noticeably not directly adjacent to these conurbations, perhaps because of planning restrictions in the green belt or urban fringe conflicts). This category of provision is further associated with a postcode sector adjacent to the historic town of Chester in the east and one to the south of Macclesfield in the more scenic west. A wide range of different types of recreation in this category of provision is present in Cheshire (Table 5.18).

Temporary recreational provision again appears to favour urban fringes, but not the major ones of the northern part of the county. Instead, it is more apparent in the town fringes throughout the county and especially around Crewe in the south. The major temporary recreation of riding events and farm open days in the county require larger areas of land than many of the small holdings on the northern fringe are able to provide.

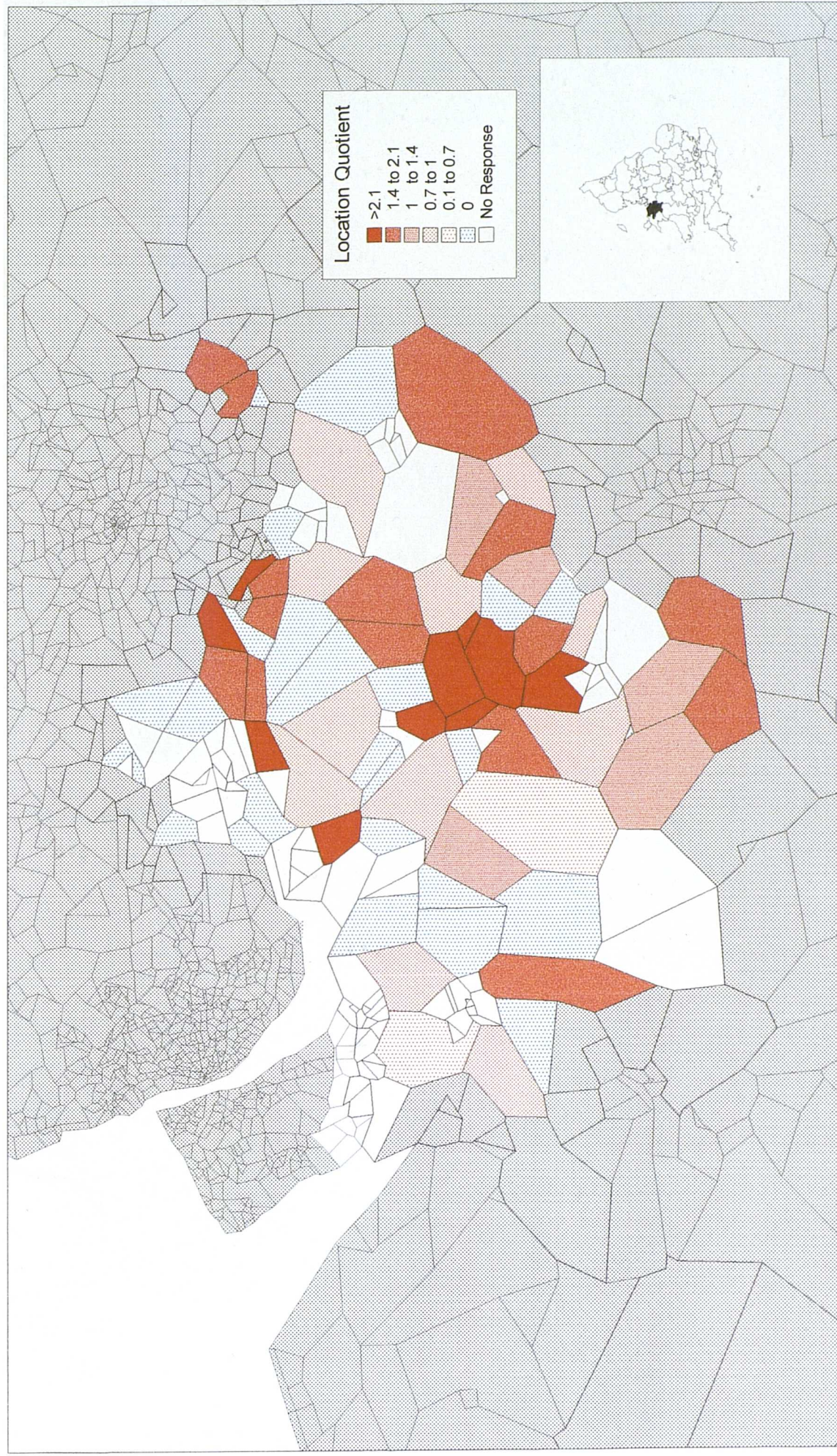


Figure 5.7. Specialization in recreational provision, by postcode sector, in the county of Cheshire. Scale 1cm:4.5km. (Source: Author's survey).

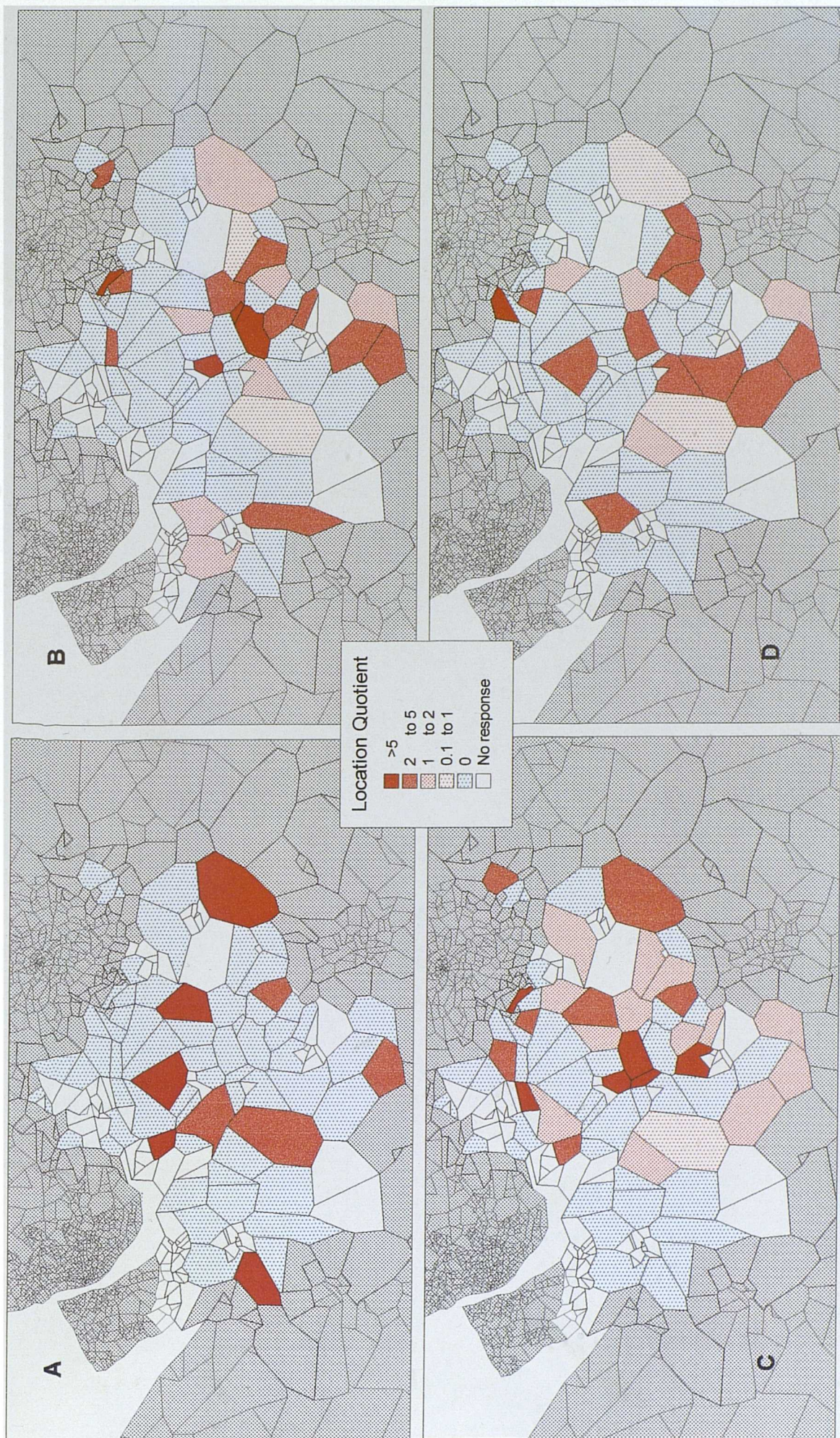


Figure 5.8. Specialization in different categories of recreational provision, by postcode sector, in the county of Cheshire. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:7.6km. (Source: Author's survey).

(iv). LEICESTERSHIRE.

The county of Leicestershire is a land-locked county in the eastern Midlands. It has a population density a fraction above the average for England and Wales. The dominant urban centre is the city of Leicester located in the centre of the county. Loughborough in the north, Coalville and Ashby de la Zouch in the north-west, Hinckley in the south-west, Market Harborough in the south-east, and Melton Mowbray in the north-east represent the other important settlements. A small part of the county in the east has since been re-designated as Rutland by boundary re-organisation.

Agriculturally, Leicestershire is predominantly grade 3 land, promoting a highly mixed arable-pastoral landscape (MAFF 1976). The county has a long tradition of livestock breeding, especially cattle and sheep, although the main modes of production are now beef and cereals. Cereals and dairying are slightly more prevalent in the north-eastern half of the county and pastoral cattle and sheep production in the south-western half (See Bowler 1981 for an examination of regional specialization in Leicestershire agriculture). A mixture of farm sizes is present, again reflecting the mixture of farming systems. The county was one of the first in the country to set up a FAG (1992). There are no major rural tourist attractions in the county but in the north-west the attractive area of Charnwood Forest contributes to visitor appeal and in the eastern part of the county the rolling landscape, sandstone villages and Rutland Water, a centre for water sports and outdoor recreation, also act as an attraction.

Overall, the provision of recreation in Leicestershire exhibits a very distinct urban fringe effect, especially to the north and south of the city of Leicester (Figure 5.9), but also around Hinckley in the south-west and Loughborough in the north. Farms in the north-east of the county are generally more specialized in recreational provision. This may be linked to the larger arable holdings in this area. More specifically, if the different categories of recreational provision are disaggregated, these two overall patterns are reinforced. A distinct urban fringe effect remains around Leicester for all categories of recreational provision (Figure 5.10). The eastern part of the county is generally more specialized than the western half, again perhaps reflecting a combination of the agricultural characteristics of this area and the more attractive landscape.

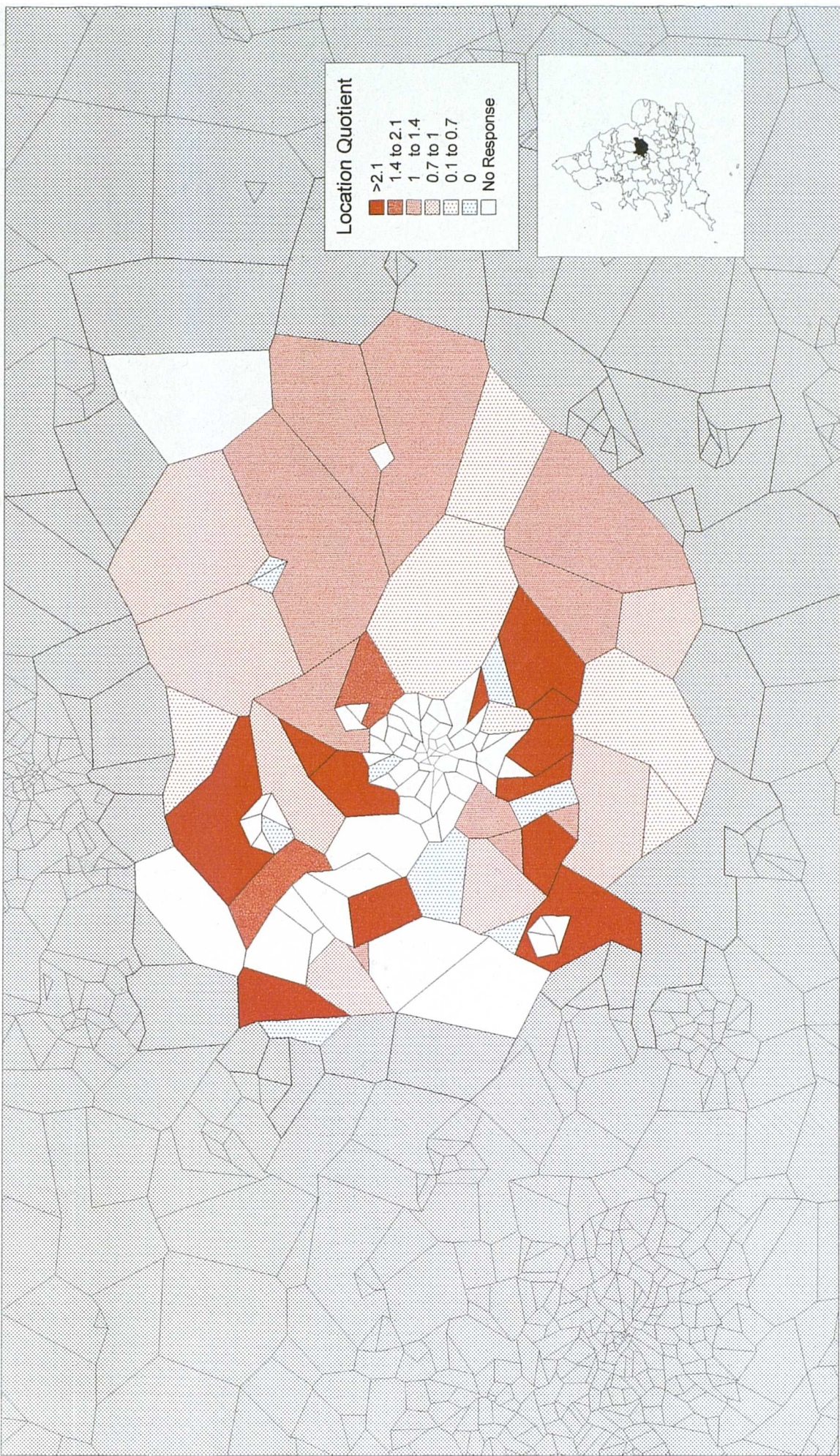


Figure 5.9. Specialization in recreational provision, by postcode sector, in the county of Leicestershire. Scale 1cm:5.6km. (Source: Author's survey).

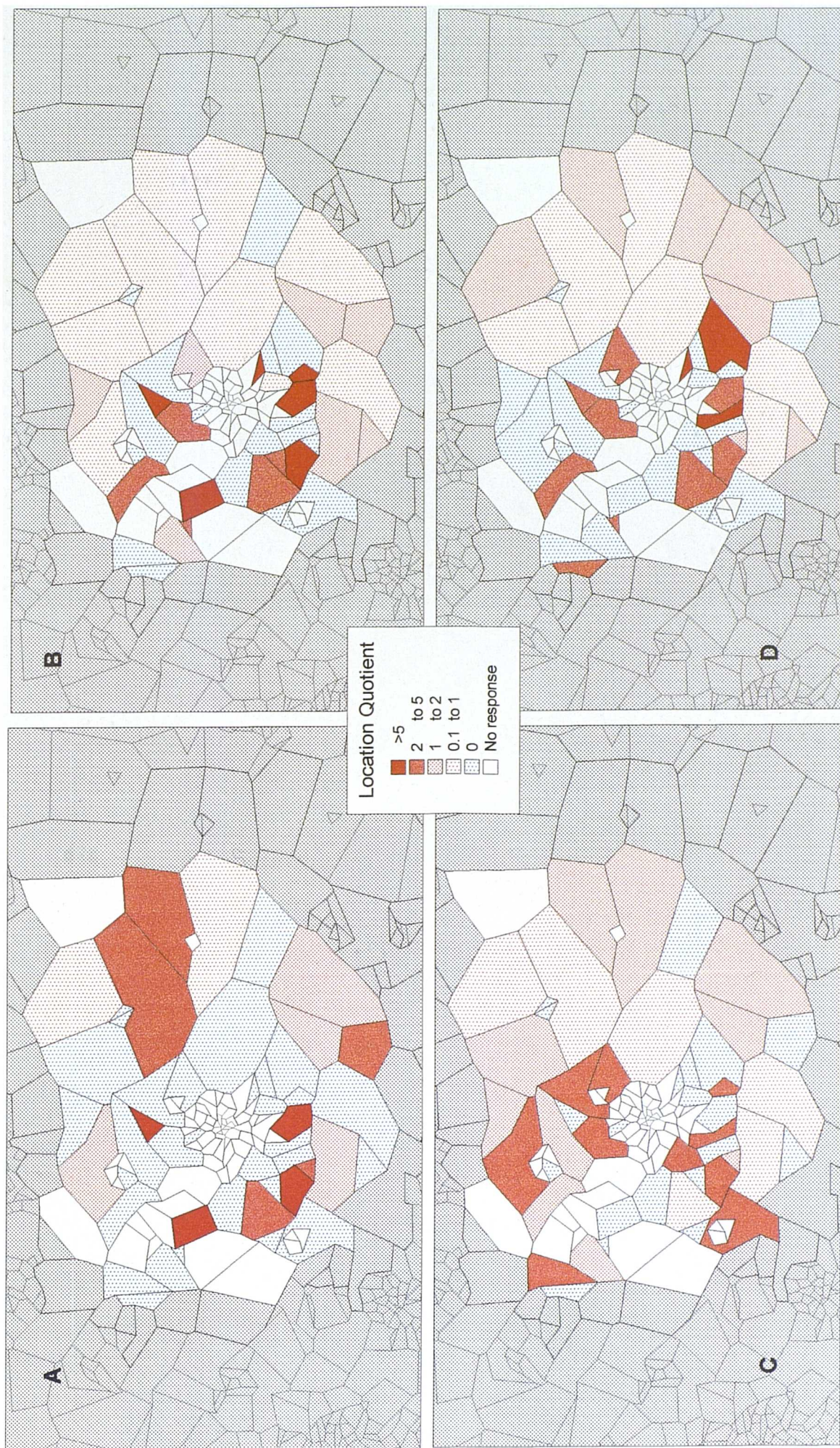


Figure 5.10. Specialization in different categories of recreational provision, by postcode sector, in the county of Leicestershire. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:9.2km. (Source: Author's survey).

(v). KENT.

Situated in the extreme south-east of the country, Kent occupies a strategic position between London and the continent via the channel ports and channel tunnel. Kent is the second largest study area county. It is adjacent to Greater London and exhibits a population density significantly higher than the average for England and Wales. The growth pressure from London is reflected by the green belt designation of much of the north-western edge of the county. Major urban centres include Dartford, Gravesend, Rochester and Chatham in the north-west. The traditional holiday destinations of Whitstable, Herne Bay and Margate are situated along the north coast and the channel ports of Ramsgate, Dover and Folkestone on the south-west coast. Sevenoaks, Tonbridge, Tunbridge Wells, Maidstone, Ashford and Canterbury represent the major inland population centres. The Isle of Thanet, in the extreme north-east of the county, was designated 1994-1999 as an EU Objective 2 region of industrial decline, and some funding was available under this designation to support the adjustment of farm structures.

Regularly referred to as the 'Garden of England', Kent supports the highest area of land under horticultural production of any of the county study areas. This includes field-scale vegetable production on the favourable grade 1 and 2 soils found along the northern coast and to the east of Canterbury (MAFF 1976), vining peas on the higher grade land of Romney Marsh and considerable areas of hop and orchard fruit production, especially in the south-west and north of the county. The relatively mild climate favours experimental crops such as soya beans and vines (see Ilbery 1985a on viticulture). It was also the first county where forage maize was extensively grown, although improvements in plant breeding now mean that maize is grown successfully throughout most of England. Elsewhere, arable cropping and mixed holdings are the predominant farm types. Farm sizes are polarised, biased towards both very large holdings (those over 300ha) and small holdings (those under 20ha), reflecting the dominance of large agricultural concerns and the demand for small holdings.

The Kent Downs AONB covers 878 km² and follows the North Downs from the Surrey border to the sea, ending in the White Cliffs of Dover. It is predominantly chalk downland which has a high scenic value. Part of the High Weald AONB lies in the south-west along the border with Sussex. Kent attracts large numbers of tourists, including many foreign visitors. Alongside the attractive downland, historic villages and mixed farmscape, the historic city of Canterbury acts as a major focus. Surprisingly, given the importance of tourism in the county, a FAG was only set up relatively recently (1995), although many other groups

actively promote attractions in the county, reflecting a mature tourism infrastructure.

From the maps, the provision of recreation is widespread throughout the county, although a slight trend towards stronger specialization in the north-west of the county is apparent (Figure 5.11). Disaggregating the provision by category produces four distinct patterns (Figure 5.12). Recreational provision which is open to the public without booking is concentrated in the major urban fringe associated with London in the north-west of the county, but interestingly not in the immediate fringe sectors which reflects the findings for the Manchester conurbation in Cheshire. It is found in almost every other minor urban fringe area throughout the rest of the county. Elsewhere, and especially in the less populated and relatively less accessible south, this category of provision is almost exclusively absent. Recreational provision available by arrangement mirrors this distribution, although it is slightly less concentrated in immediate urban fringes and is more widespread throughout the southern and eastern parts of the county. Recreational provision for clubs, groups and syndicates presents a different picture. Farms in the north-east of the county still exhibit the highest degree of specialization in this category of provision but, it is also more evenly distributed throughout the whole county and especially in the south around the remoter areas of Romney Marsh where no other categories of recreational provision have been observed. Temporary recreational provision appears to favour the more minor urban fringes in the county.

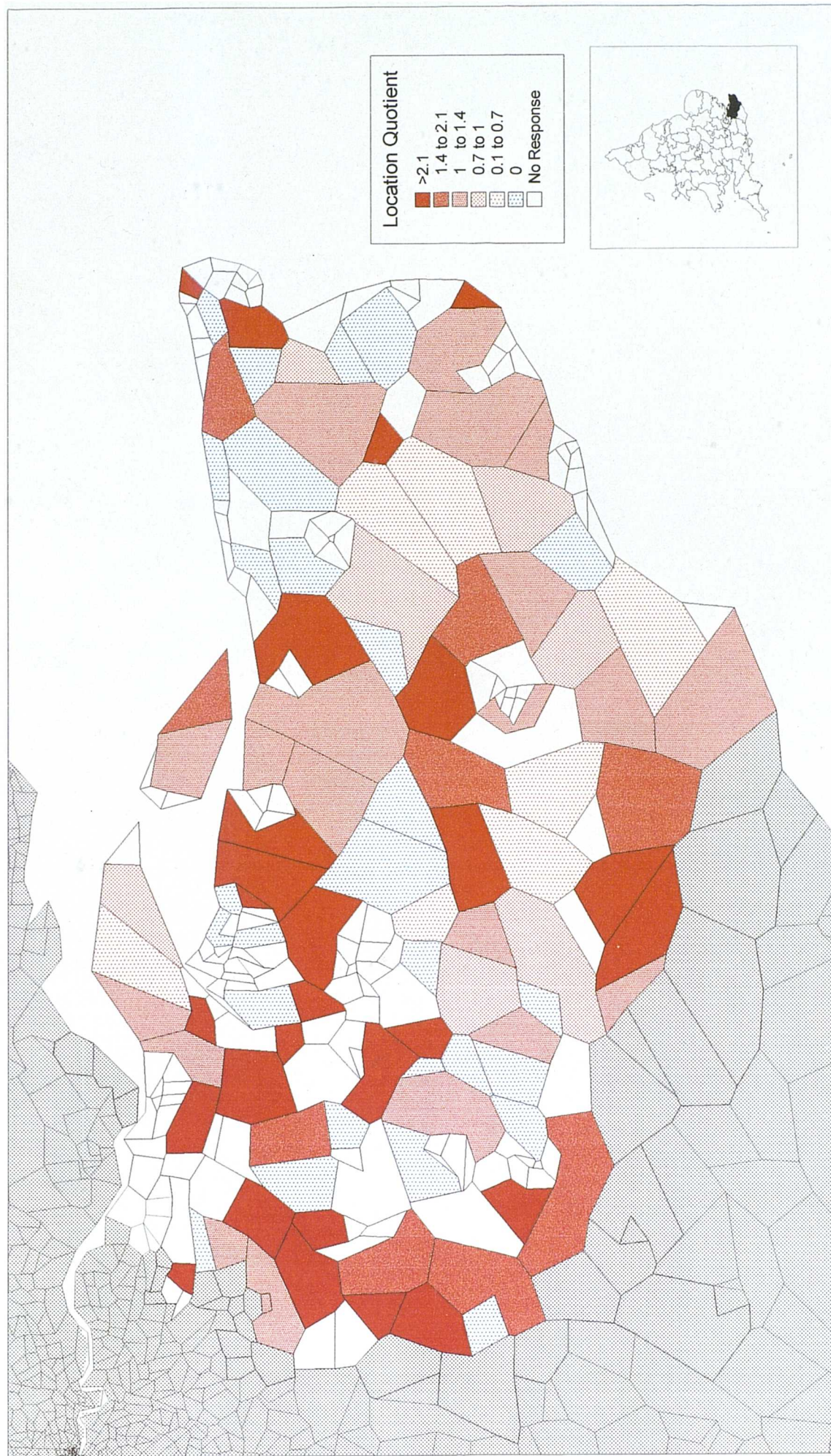


Figure 5.11. Specialization in recreational provision, by postcode sector, in the county of Kent. Scale 1cm:5km. (Source: Author's survey).



Figure 5.12. Specialization in different categories of recreational provision, by postcode sector, in the county of Kent. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:9.4km. (Source: Author's survey).

(vi). GLOUCESTERSHIRE.

The county of Gloucestershire is located at the head of the Severn estuary at the southern end of the border with Wales. It is quite a sparsely populated county with a population density well below the average of England and Wales. There are only four notable centres of population: the county town of Gloucester, with its historic docks and cathedral; the regency spa town of Cheltenham; the more industrially orientated Stroud; and Romanic based Cirencester. All, except the latter, are located in the centre of the county close to the western edge of the Cotswold escarpment which runs diagonally across the county from the south-west to north-east. Over half of the county is located within the Cotswold Hills AONB, the largest AONB (2038 km²). This area is renowned for its scenery, especially its rolling landscape and picturesque villages made of local honey coloured oolitic limestone. The extreme west of the county, known as the Forest of Dean, north of the river Severn, also includes a small part of the Wye Valley AONB. One of the earliest FAGs was established in the county in 1993.

Agriculturally, the county is mainly grade 3 agricultural land (MAFF 1976) and exhibits two distinct agricultural areas. To the west of the Cotswold escarpment, on the lower lying land, agriculture is mainly pastoral in nature - predominantly dairying, cattle and sheep production on smaller holdings. In contrast, the eastern Cotswold District of the county is dominated by arable cropping on large holdings. A fourth-wave ESA was established in 1994 in this latter area to encourage the protection of Jurassic limestone grassland and prevent the spread of arable production.

The provision of recreation in the county exhibits a distinct specialization in the south-east and appears to be associated with the larger arable holdings located on the Cotswold plateau (Figure 5.13). This is reflected throughout the separate categories of provision in Figure 5.14. Indeed, it appears that this part of the county is most suited to all forms of recreational provision. However, there are a number of exceptions; most notable is the high specialization of recreation 'open to the public without booking' in the scenic Forest of Dean and Wye Valley area. The distinct lack of recreational provision for clubs, groups and syndicates in this area is also a feature. It is interesting to note that there were no responding farms in three postcode sectors in this area which perhaps reflects the dominance of woodland.

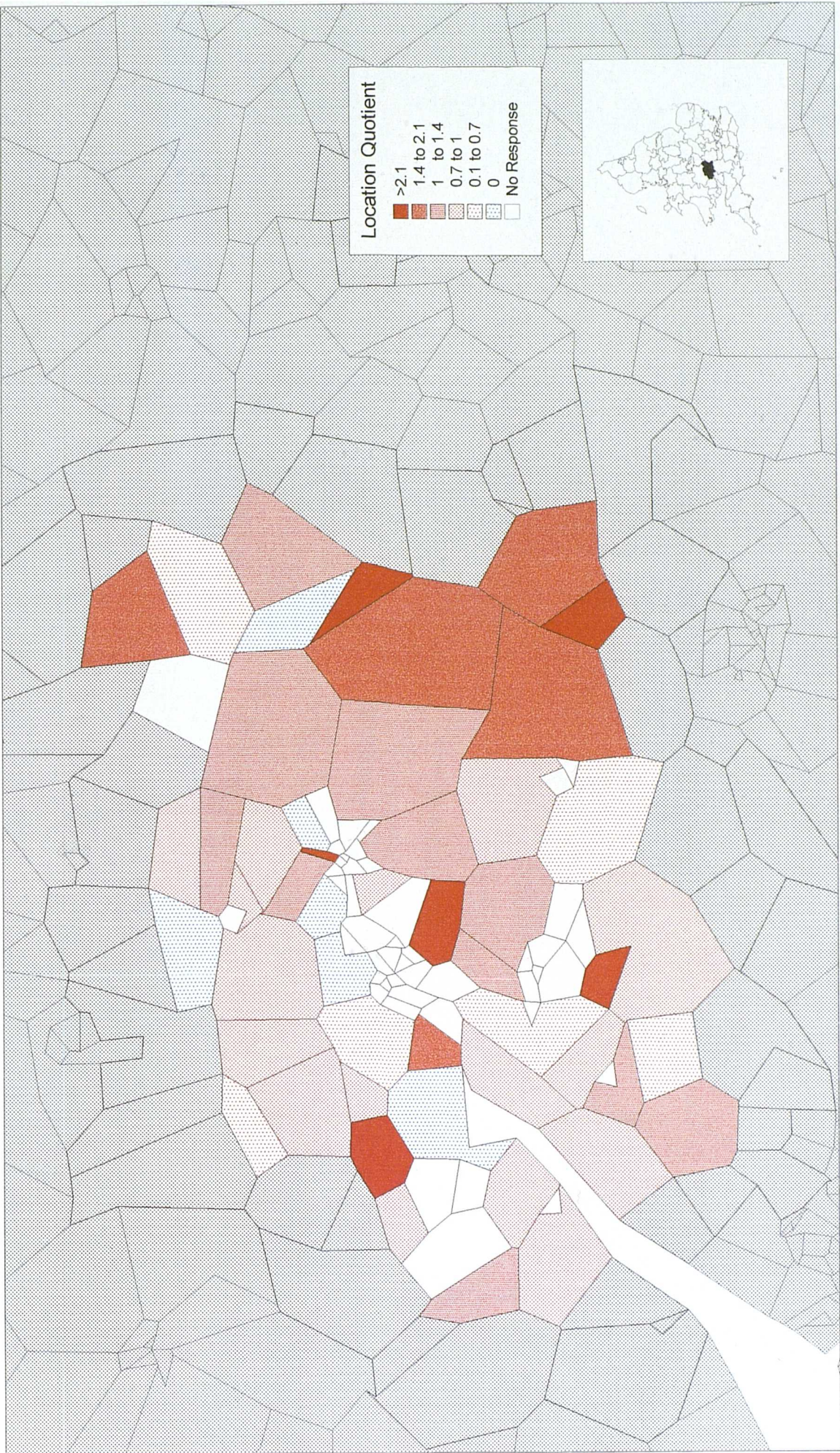


Figure 5.13. Specialization in recreational provision, by postcode sector, in the county of Gloucestershire. Scale 1cm:4.4km. (Source: Author's survey).

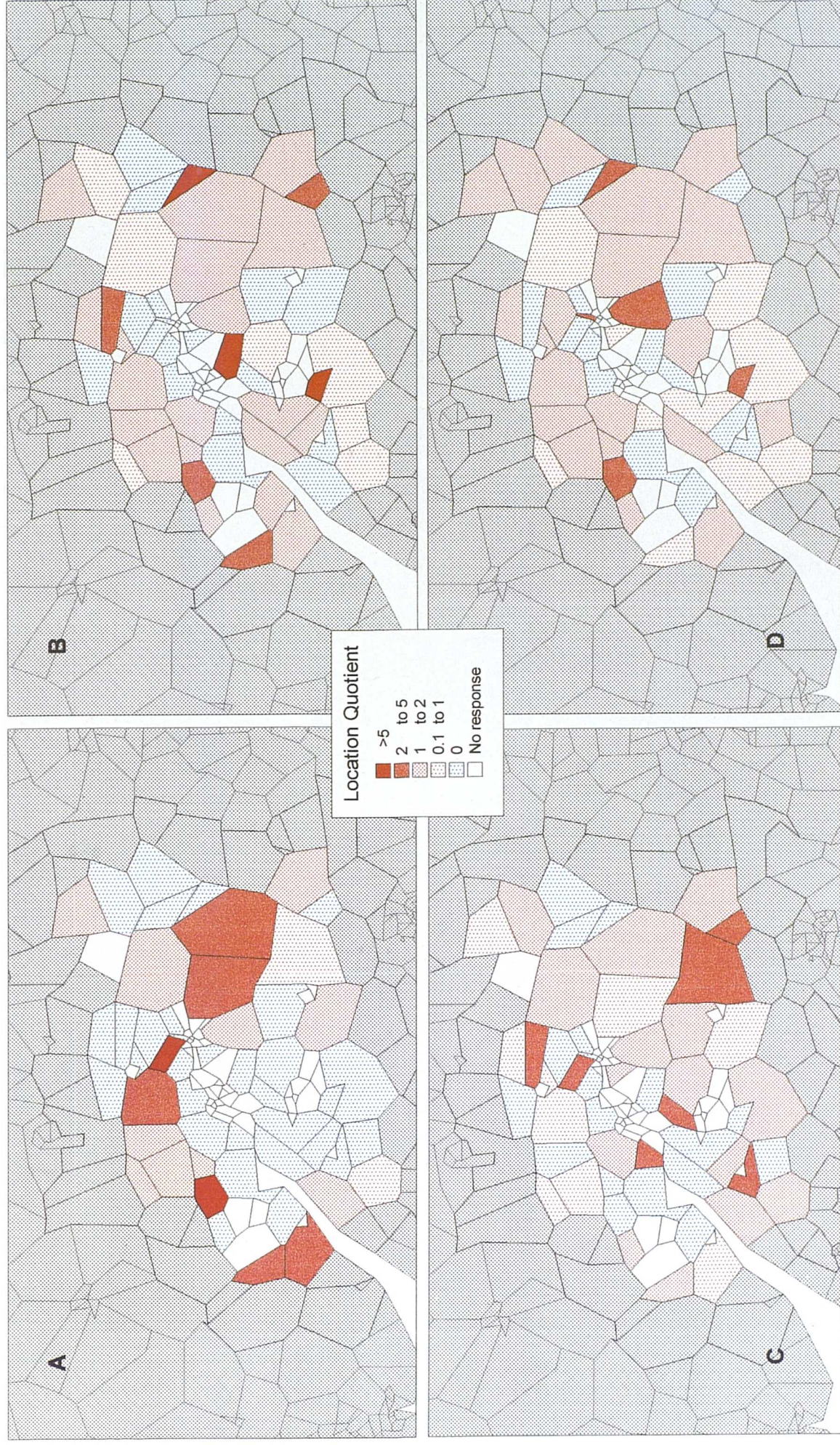


Figure 5.14. Specialization in different categories of recreational provision, by postcode sector, in the county of Gloucestershire. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:8.3km. (Source: Author's survey).

(vii). HERTFORDSHIRE.

The land-locked county of Hertfordshire is located to the north of Greater London. It is the smallest study area county and has the highest population density of all the selected counties. The main centres of population are the commuter belt towns of Watford, Hemel Hempstead, St Albans, Stevenage, Hertford and Letchworth. Its close proximity to London, high population density and relative affluence promote a very high demand for recreational activities. However, the majority of the county is under green belt designation.

The county is predominantly grade 3 agricultural land, although there is some grade 2 in the north-east of the county (MAFF 1976). Arable cropping is the dominant mode of production accounting for over 70% of the agricultural land. Farms are predominantly over 100 ha in size (over 78% of the agricultural land) and out of the eight study areas the county has the highest proportion of agricultural land accounted for by farms over 300 ha in size. This may reflect both the intensive arable nature of production and high levels of corporate management and investment. An increase in non-farm income, and especially on-farm diversification, have been observed before in the area (See Marsden *et al* 1986a for evidence from other green belt localities).

The postcode maps reveal that recreation in the county is consistently over-specialized throughout a central zone across the county (Figure 5.15). There is a surprising lack of recreational provision in the southern part of the county, although there remain sectors which exhibit a high degree of specialization. This may relate to a high number of small hobby farms in this major urban fringe area whose operators are not interested in, or are too small to provide, recreation. Equally a 'green belt effect' which discourages development may be operating. However, this does not appear to be constraining recreational provision elsewhere in the county. An examination by category of provision reinforces this relative paucity in the southern part of the county (Figure 5.16). Recreational provision which is open to the public without booking is scattered in a relatively small number of sectors throughout the county. Recreation available by arrangement is more widely distributed but biased towards the northern half of the county, perhaps reflecting a 'halo' effect beyond the green belt as theorized by the green belt model of Bryant *et al* (1982).

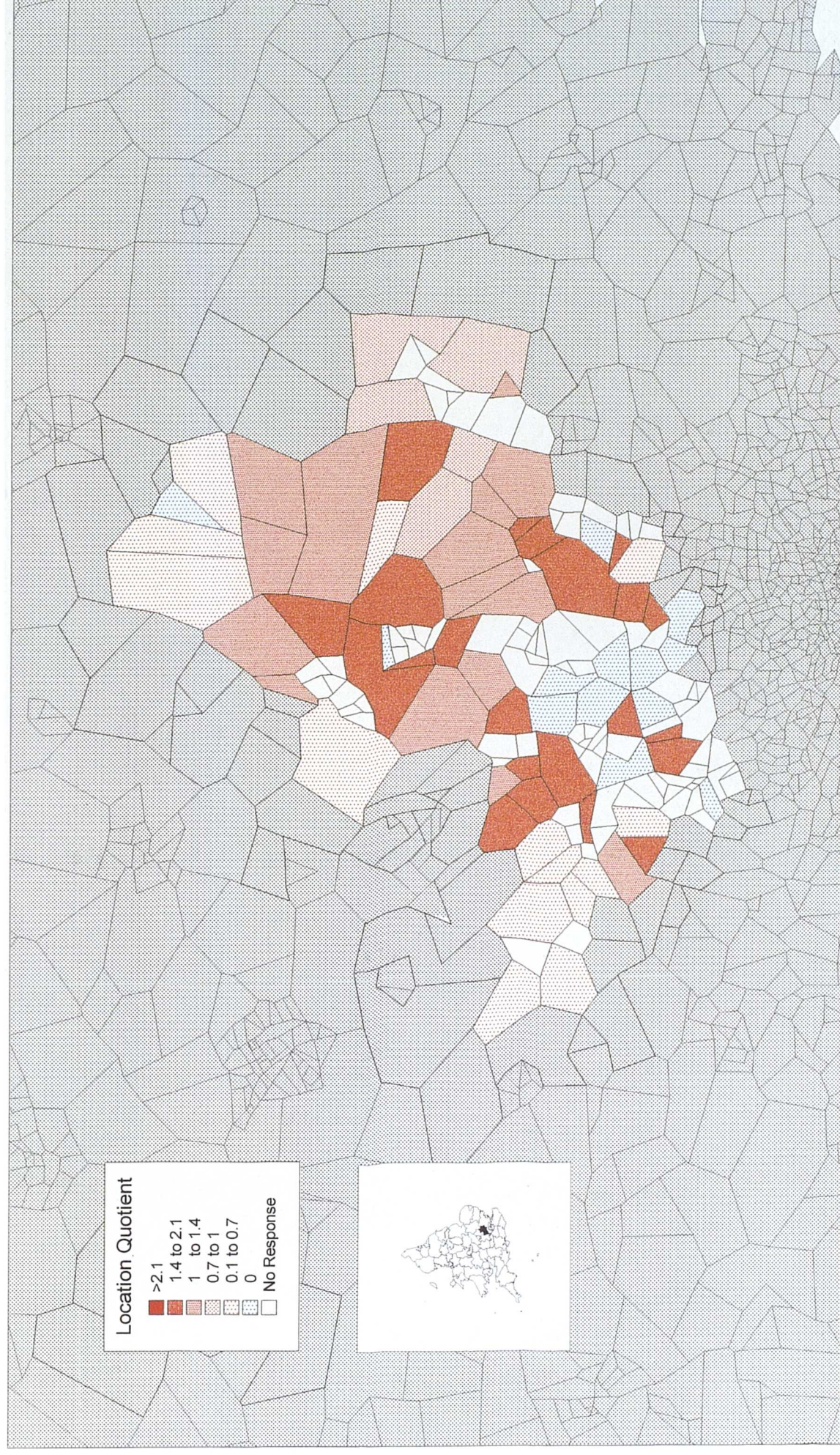


Figure 5.15. Specialization in recreational provision, by postcode sector, in the county of Hertfordshire. Scale 1cm:4.3km. (Source: Author's survey).



Figure 5.16. Specialization in different categories of recreational provision, by postcode sector, in the county of Hertfordshire. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:7.5km. (Source: Author's survey).

(viii). HUMBERSIDE.

The introduction of a new local government structure on 1st April 1996 means that the county of Humberside, created in 1974, no longer exists. It is now divided between the East Riding of Yorkshire, North East Lincolnshire, North Lincolnshire and Kingston Upon Hull. The former county is divided by the Humber estuary running west to east, with approximately two thirds of the county to the north of the Humber and the remaining third to the south. Humberside is the third largest of the study area counties and has an average population density well below that of England and Wales. Kingston Upon Hull, located on the Humber in the centre south of the northern portion of the county, is the largest urban centre and was also at the centre of an area of EU Objective 2 designation (1994-1999). Elsewhere in the northern part of the county, there are few other large settlements, except the coastal town of Bridlington just south of Flamborough Head. In the southern part, the fishing port of Grimsby on the mouth of the River Humber and Scunthorpe in the centre represent the main centres of population. Opportunities for tourism are limited, although a FAG was initiated in 1995.

Agriculturally, Humberside contains a high proportion of grade 1 and especially grade 2 land. Together this accounts for about half of the agricultural land of the county, the remainder being grade 3 (MAFF 1976). Unsurprisingly, given the land quality, arable cropping is the ascendant farm type, accounting for nearly 83% of the agricultural area of the county. Associated pig and poultry production is a significant characteristic of the county and is linked to the indigenous feed grain production, the importation of other feed components via the Humber and the location of feed mills in the area (see Symes and Marsden 1985). Over 75% of the agricultural area of the county is comprised of farms of over 100 ha in size (see Marsden 1984, on North Humberside).

Postcode mapping demonstrates that recreation in the county is most strongly associated with urban fringes, especially those to the north and east of Hull and around Grimsby (Figure 5.17). Notably, there is no recreational provision in sectors immediately to the south of the Humber and a lower than average specialization along much of the Spurn Head Peninsula. Disaggregating by category of provision reveals patterns very similar to the overall one (Figure 5.18). All four categories of provision exhibit the strongest specialization in urban fringe sectors, although again the provision of recreation open to the public without booking appears not to favour immediate urban fringe locations and be more evenly distributed throughout the county.

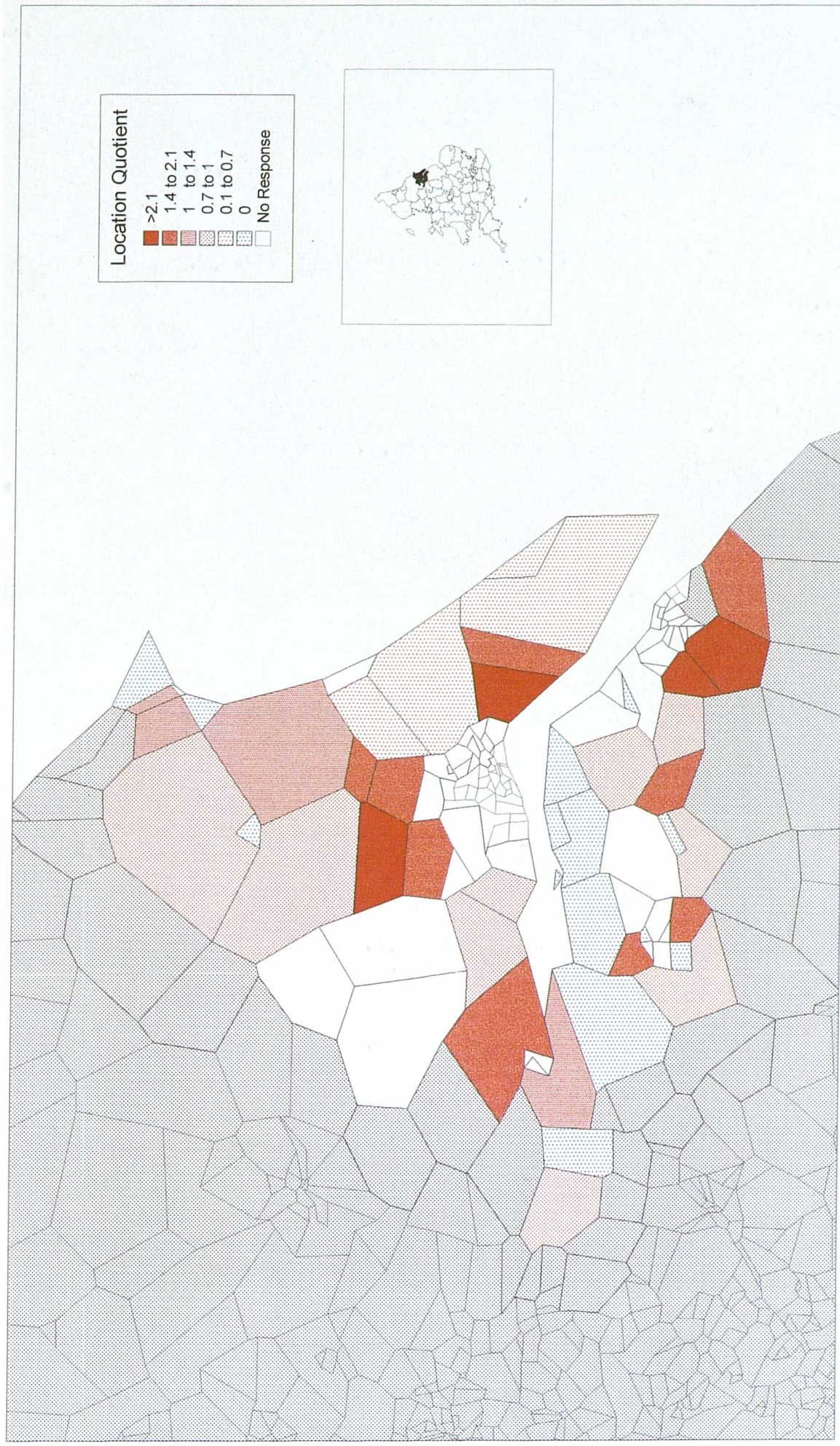


Figure 5.17. Specialization in recreational provision, by postcode sector, in the county of Humberside. Scale 1cm:7km. (Source: Author's survey).

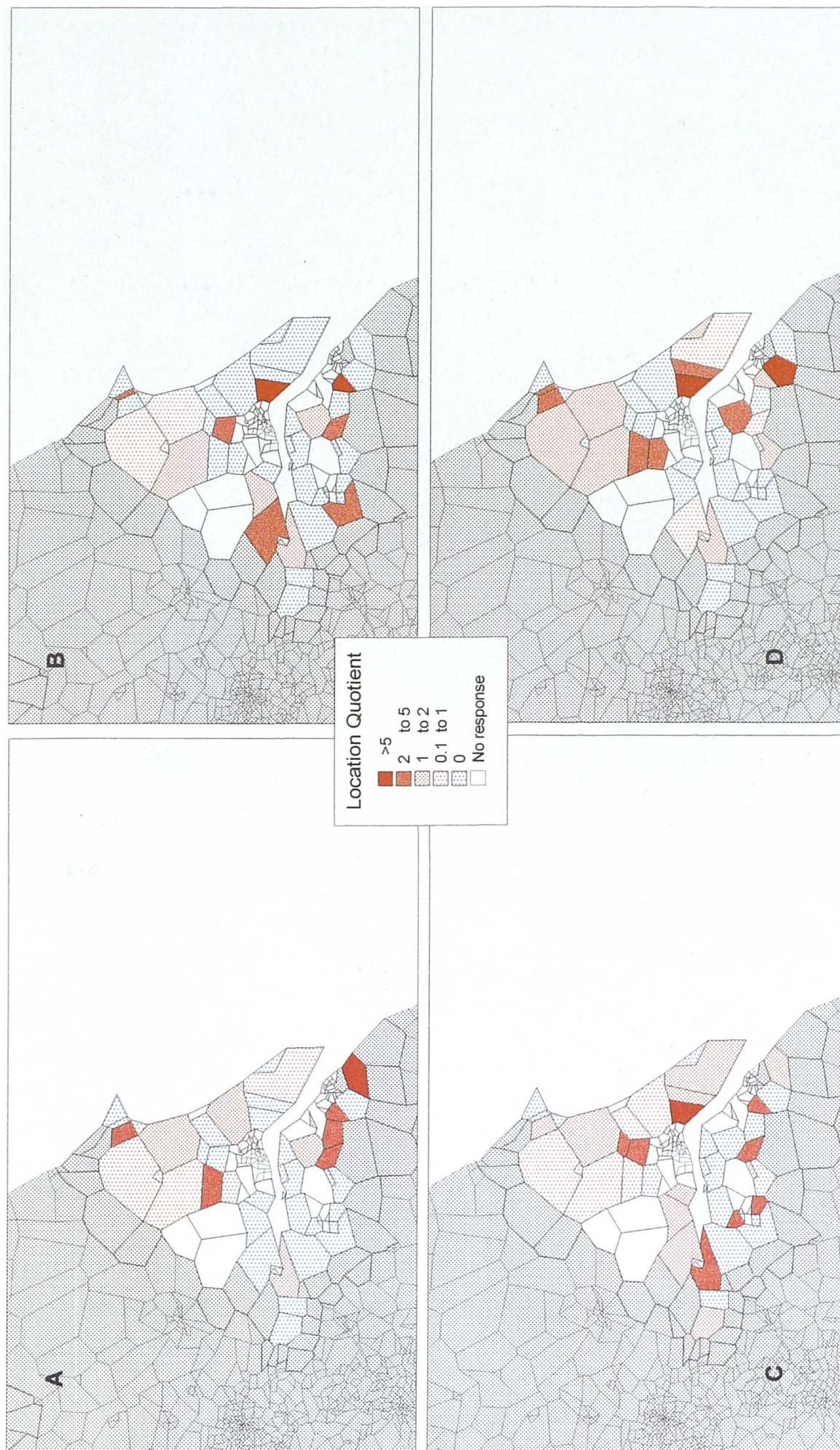


Figure 5.18. Specialization in different categories of recreational provision, by postcode sector, in the county of Humberside. Key: (A) open to the public, (B) available by arrangement, (C) clubs, groups and syndicates, (D) temporary. Scale 1cm:16km. (Source: Author's survey).

5.4. Observations on Intra-County Analysis.

Inevitably the work presented in section 5.3 is predominantly descriptive in nature, although classification and mapping according to recreation types and categories aids considerably the preliminary identification of processes at work. These will be re-visited later in the thesis. However, it acts as an invaluable benchmark and helps to place the farm level work into its proper perspective.

It is possible to draw out five very general observations from the intra-county pattern of recreation of the 8 counties investigated.

1. The single most distinct general trend which emerges in relation to the overall provision of recreational activities relates to the consistent association between recreational provision and urban fringes.
2. Recreational activities open to the public without booking appear to exhibit the strongest concentrations reflecting, in part, their relatively low incidence. The locations of these activities exhibit a general correlation with both urban fringes and popular tourist destinations such as coastal areas and National Parks.
3. A distinct association with urban fringe locations emerges in relation to the provision of recreational activities available by arrangement. These activities exhibit quite strong concentrations, again reflecting their relatively low incidence. There are significant areas where this type of provision is not present.
4. Recreational activities for clubs and syndicates exhibit the most even distribution of the individual categories of recreational provision within the study areas although a concentration of activities in urban fringes is still evident in many areas.
5. The provision of temporary recreational activities exhibits a correlation with urban fringe locations. A weaker association also appears to be present between tourist areas and temporary recreational provision.

The process of recreation mapping, using new GIS tools, represents the first time that such evidence has been gathered and analysed at the intra-county level. It has already generated

results which both uphold and contradict findings of previous work on farm diversification and recreation and has once again illustrated the diversity of farm-based recreation.

5.5. Summary.

This chapter has focused on the analysis of data obtained from the extensive postal questionnaire of farms in eight counties of England and Wales. It has documented the incidence of different categories and types of recreational activities on farms in the sample as a whole, and highlighted the differences which exist between and within the county study areas in terms of the provision of recreational activities on farms. A brief summary of these three main points is presented.

1. **The Incidence of Recreation.** Of the responding farms, 41% have some form of permanent or temporary recreational provision, excluding recreation for personal use. This level is significantly higher than those which have been reported by previous studies. The overall incidence of recreation reported here is significantly higher than that reported in previous studies. It encompasses a range of different categories and types of recreation, many of which have not been differentiated before. In a few cases, the occurrence of these types is relatively widespread, whereas many others exhibit a very low incidence. The results highlight the complex nature of recreational provision. The majority of the responding farms with recreation provided more than one category and / or type of recreation. The extent of this multiple provision has never been ascertained before and highlights the fact that farm-based recreation is a complex phenomenon.
 2. **The Inter-County Distribution of Recreation.** Recreation exhibits significant differences between the county study areas, ranging from a low of 23% of the responding farms in the county of Gwynedd with some form of permanent or temporary recreation, to a level of 47% in the county of Hertfordshire.
 3. **The Intra-County Distribution of Recreation.** The distribution of recreation within the eight county study areas illustrates strong associations between different categories of recreational provision and general locational factors. A strong association exists between all categories of recreational provision and urban fringe locations, though a simple relationship between size of urban area and provision in its fringe seems to be disrupted by anti-development planning policy.
-

6. FARMERS' CONSTRUCTIONS OF FARM-BASED RECREATION.

The analysis presented in this short chapter focuses on farmers' constructions of recreational activities. This is an important issue to emerge from the analysis of the postal questionnaire survey. Many farmers appear to have different constructions of what constitutes recreational provision to those put forward in the questionnaire. It is necessary to examine this issue because it represents a key dimension which complicates the interpretation of the reasons for adoption and non-adoption of recreation to be provided in Chapters 7-10. The analysis in this chapter is divided into two sections. The first documents the variety of ways in which farmers construct different categories and types of recreational provision. The second section considers the implications of farmers' constructions in relation to the findings of previous research and the subsequent analysis carried out in this project. The analysis integrates both quantitative methods based on the results from the postal questionnaire survey and more detailed qualitative analysis of the ethnographic case studies. This employs quotes, cameos and case studies, and seeks to inform the interpretation of farmers' constructions generated by the quantitative analysis.

6.1. Farmers' Constructions of Farm-Based Recreation.

This section explores how farmers' constructions of what constitutes recreational provision are different to those anticipated, as reflected in the design of the postal questionnaire. The discussion is divided into four sub-sections. After a brief overview, these constructions are explored by category, type, and location of recreational provision.

(i). AN OVERVIEW OF FARMERS' CONSTRUCTIONS OF FARM-BASED RECREATION.

The behaviour of the postal questionnaire respondents is summarised in Figure 6.1. This highlights the complex way in which farm businesses responded to the questionnaire. Of the farms with some form of recreational provision, a total of 61% completed the section of the postal questionnaire survey relating to key reasons for why they **had not** developed any form of recreation, even though they had already identified that they had some form of recreational provision on their farm (Table 6.1; 48% + 13%). This was despite the clear instructions requesting them to complete the section relating to the key reasons for adoption, regardless of what category of provision or type of recreation they provided.

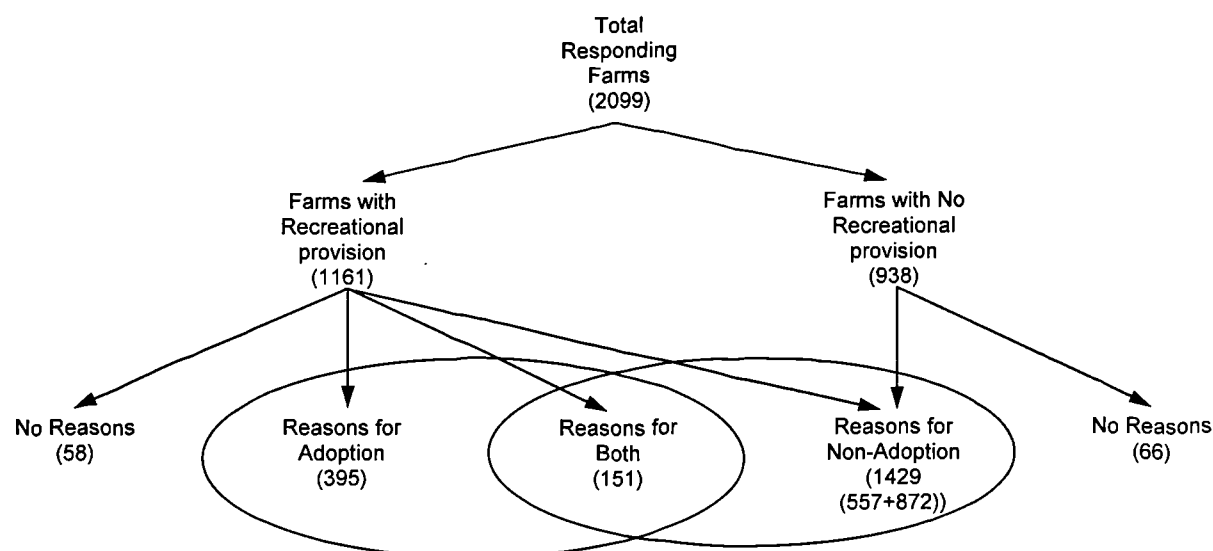


Figure 6.1. Summary of the behaviour of the respondents (Source: Author's survey).

CATEGORY OF RECREATIONAL PROVISION	FARMS (N)	% OF FARMS			
		REASONS FOR ADOPTION IDENTIFIED	REASONS FOR NON-ADOPTION IDENTIFIED	REASONS FOR BOTH ADOPTION AND NON-ADOPTION IDENTIFIED	NO REASONS IDENTIFIED
FARMS WITH SOME FORM OF RECREATIONAL PROVISION	1161	34	48	13	5

Table 6.1. An overview of farmers' constructions of recreational activities (Source: Author's survey).

Strong constructions of what constitutes 'farm-based recreation' are present amongst the farming community. Two broad groups of responses are evident. A first group is those farmers with some form of recreational provision on their farm who have followed the instructions on the questionnaire and identified the key reasons which promoted their provision of recreation. These 'accepted' constructions appear to come about for one of two reasons. Farmers have simply followed the clear instructions and completed what was requested rather than challenging the holistic construction of 'farm-based recreation' imposed on them by the questionnaire, regardless of any personal construction that they might hold. Alternatively, it may be because they accept that some or all of the recreational provision on their holding conforms to the construction of 'farm-based recreation' in the questionnaire survey and as a result they completed the appropriate section. This group is comprised of 34% of the responding farms with some form of recreation. A second group

are those with recreation who have taken a conscious decision to contest the construction of recreation put forward by identifying the reasons why they have not adopted recreational provision (the 48% of the respondents). Contested constructions appear to come about because farmers do not consider the recreational provision on their farm to be 'farm-based recreation'. These respondents see 'farm-based recreation' as something different to the activities which already take place on their farm and on this basis they have decided to identify the reasons for non-adoption. Evidently, many farmers prefer to look upon their recreational provision as part of their everyday lives and farming culture rather than as a form of diversification (with its commercial connotations).

The picture is further complicated by the 13% of farmers with some form of recreational provision who identified reasons for both adoption and non-adoption of recreation in relation to their farms, despite these sections being mutually exclusive in the questionnaire! In these cases, the respondents had followed the instructions and completed the correct section, but either felt strongly or were unsure whether or not their recreational provision constituted 'farm-based recreation' to the extent that they completed both sections. It is important to remember that the way in which respondents have answered the postal questionnaire survey is likely to be highly dependent on each individual. Not only is it likely that each individual's construction of what constitutes 'farm-based recreation' varies but, more importantly, that their personal constructions might not be expressed because of their role or position within the farm business. For example, a farm secretary or a farm manager completing a questionnaire might be more likely to follow the instructions and complete the appropriate sections than a member of a farm family household, regardless of their own personal construction of recreation. The emerging picture indicates that, in general, the farming community only construct a subset of the activities defined as 'farm-based recreation' in Chapter 1 as farm-based recreation. A distinct group of activities with 'contested' constructions emerge.

It seems likely that either contested or accepted constructions would be widespread throughout the respondents in relation to recreational provision with certain characteristics. However, the behaviour of respondents to the questionnaire reflects both the type of recreation which they provide and whether they have simply followed the instructions on the questionnaire. As such it does not necessarily reflect the personal construction of different types of recreation held by the respondent. An analysis of the recreational provision found on farms with contested and accepted constructions, especially those with contested constructions because they encapsulate personal constructions undiluted by those following

instructions, will give a relative indication of the categories and types of recreational provision most strongly associated with these two constructions. This said, analysis by recreation category and type of provision permits a preliminary insight into farmers' constructions of recreation. However, the postal questionnaire survey was not designed to explore farmers' constructions, although it has uncovered this issue, and it is only possible to gain a detailed understanding of farmers' constructions from more intensive methods.

As outlined in Chapter 4, the ethnographic case studies correspond to respondents who completed the section of the postal questionnaire survey relating to the reasons for the provision of recreation where the question facilitating contact for further research was located (the respondents which formed the sample from which the ethnographic case studies were selected). Only three out of these twenty farms (15%) contested the construction of recreation put forward in the questionnaire by completing the section relating to the reasons for not having recreational provision in addition to the reasons for having recreational provision. This is not surprising as the case studies are not intended to be representative of those returning the postal questionnaire. However, despite this superficial lack of contestation about constructions of recreation amongst the ethnographic case studies, in terms of their responses to the postal questionnaire, quite strong constructions of what did and did not constitute recreational provision became evident.

There are two reasons why these contested constructions are not widely evident in the case study farms. First, most of these farms have more than one type of recreational provision. Consequently, accepted constructions in relation to one type of recreation may obscure contested constructions in relation to another type of recreation on the same farm. Secondly, these farms have simply followed the instructions on the questionnaire, accepted the constructions of recreation put forward, and completed what was requested. The constructions of recreation which emerge from the ethnographic interviews broadly reflect the continua already observed in relation to different categories and types of recreational provision. However, it is still possible to gain more detailed insights into farmers' constructions of recreational provision from these cases.

(ii). FARMERS' CONSTRUCTIONS BY CATEGORY OF RECREATIONAL PROVISION.

Farmers' constructions of recreation can be disaggregated according to their combination of categories of recreational provision. If an informative analysis is to take place which can associate constructions with specific categories of recreational provision, it is necessary to identify and separate the 31 possible combinations of categories of recreational provision .

These are presented in Table 6.2. It is clear that the proportion completing reasons for non-adoption rather than adoption of recreation varies significantly with different combinations of categories of provision (Table 6.2). This shows that farmers' constructions of recreation are associated with the category of recreational provision they provide. Table 6.2 is arranged in descending order of the proportion of each category combination where respondents have over-ruled the construction of recreation put forward in the questionnaire by identification of reasons for non-adoption. This dimension provides the clearest indicator of farmers' constructions of recreation.

Within the 48% solely 'contesting', there is much variation according to the categories of recreational provision present (Table 6.2). Two interacting trends are evident. First, in terms of category of provision, an increase in the proportion of farms identifying reasons for non-adoption appears to relate to the specific category of provision provided. Focusing on farms where only a single category of provision is present generates the most meaningful comparisons. The highest proportions who thought that their provision did not constitute 'farm-based recreation' are found on farms with relatively low intensity forms of recreation. For example, farms where the only recreational provision is for personal use exhibited the highest proportion (73%) who did not think that this provision constituted 'farm-based recreation' and had only completed the section identifying reasons for non-adoption. This is closely followed by the farms where the only recreation is temporary provision. Here, 68% did not think that their provision constituted 'farm-based recreation' and had only completed reasons for non-adoption. Conversely, the lowest proportions who thought that their provision did not constitute 'farm-based recreation' are found on farms with a relatively high intensity category of recreational provision. For example, 28% of the responding farms where the only recreational provision is open to the public identified reasons for non-adoption, rather than adoption. This still remains a relatively high figure and is perhaps indicative of the diversity of different types of recreation which are still encapsulated within this category. The second trend relates to the number of different categories of recreational provision present on any one farm. Farms with a higher commitment to recreation, in terms of multiple categories of provision, are less likely to identify reasons for non-adoption. Indeed, none of the farms with all five categories of provision identified reasons for non-adoption. However, this trend does not depend solely on the number of different categories of provision, but also on an interaction between the specific individual categories present, as outlined above.

COMBINATION OF CATEGORY OF RECREATIONAL PROVISION	FARMS (N)	% OF FARMS WITH RECREATIONAL PROVISION			
		REASONS FOR ADOPTION IDENTIFIED	REASONS FOR NON-ADOPTION IDENTIFIED	REASONS FOR BOTH ADOPTION AND NON-ADOPTION IDENTIFIED	NO REASONS IDENTIFIED
4	299	16	73	6	5
5	67	15	68	10	7
12	10	30	60	10	0
3	133	25	59	14	2
2	60	24	55	13	8
14	15	33	53	7	7
24	44	27	52	19	2
45	67	30	51	12	7
13	14	28	42	30	0
34	90	46	37	11	6
234	31	36	36	15	13
134	6	67	33	0	0
25	32	44	31	19	6
1	43	51	28	16	5
23	24	50	25	17	8
345	28	50	25	14	11
235	26	54	23	15	8
35	35	31	20	46	3
245	25	56	16	12	16
2345	17	70	12	12	6
135	9	89	11	0	0
1245	10	70	10	20	0
15	20	75	10	5	10
125	12	84	9	7	0
1234	4	25	0	50	25
123	3	67	0	33	0
1235	11	73	0	18	9
124	3	67	0	0	33
145	4	75	0	0	25
1345	8	88	0	0	12
12345	11	100	0	0	0
TOTAL PERMANENT AND TEMPORARY ONLY	499	36	43	16	5
TOTAL ALL FORMS OF RECREATION	1161	34	48	13	5
TOTAL NO RECREATION	938	0	93	0	7
TOTAL OF RESPONDING FARMS	2099	19	68	7	6

Table 6.2. Farmers' constructions of recreation by category of provision, arranged in descending order of proportion of category combination identifying inhibiting factors (Source: Author's survey).

Key to Table 6.2, based on the classification presented in Chapter 1.

- 1 Provision of recreation open to the public without booking.
- 2 Provision of recreation available by arrangement only.
- 3 Provision of recreation for clubs and syndicates.
- 4 Provision of recreation for personal use.
- 5 Provision of temporary recreational events.

Those identifying reasons for adoption necessarily exhibit a reversal of the trends outlined above. A high proportion of farms identifying reasons for adoption are typically associated with those farms with a high commitment to recreation. For example, 67% of farms where the only recreational provision is open to the public without booking, identified reasons for adoption. This falls to 39% for farms where the only recreation is for clubs and syndicates and 37% for farms where the only recreational provision is available by arrangement. Farms where the only recreational provision is for personal use or temporary recreational events, exhibit the lowest proportions, identifying reasons for adoption, 22% and 25% respectively.

(iii). FARMERS' CONSTRUCTIONS BY TYPE OF RECREATIONAL PROVISION.

As farmers' constructions of their recreational activities vary according to category of provision, and specific types of recreation are associated more strongly with certain categories of provision, an interaction is likely to exist between farmers' constructions of recreation and specific types of recreation. It is possible to examine this relationship further, although not directly. This is because analysis is greatly complicated by the fact that the overall identification of reasons for either adoption or non-adoption, and the identification of specific reasons, relate to the aggregate recreational provision of the farm. Where farms have more than one category-type of recreational provision, it is impossible to attribute directly farmers' constructions of recreation to specific types of recreation. Nevertheless, it is possible to generate a relative indication of farmers' constructions according to recreation type (Table 6.3 for permanent recreation and Table 6.4 for temporary recreation). This necessarily dilutes the association between specific types of recreation and farmers' constructions, especially in relation to those types of recreation which farmers do not construct to be 'farm-based recreation'.

When sub-dividing permanent recreation by type, a continuum, rather than two distinct groups, emerges in relation to farmers' constructions (Table 6.3). This reflects the fact that farmers' constructions in this sample are relative and dependent upon their recreational provision and whether they have followed the questionnaire instructions. The continuum provides a good indication of the types of activities associated with contested and accepted constructions of recreation. Many 'traditional' activities feature highly at the 'contested constructions' pole of the continuum and a variety of less conventional activities at the 'accepted constructions' pole. These range from 57% of responding farmers with some form of game shooting, who identified reasons for non-adoption rather than adoption, to no respondents with airfields identifying reasons for non-adoption.

TYPE OF RECREATIONAL PROVISION	FARMS (N)	% OF FARMS WITH PERMANENT PROVISION			
		REASONS FOR ADOPTION IDENTIFIED	REASONS FOR NON-ADOPTION IDENTIFIED	REASONS FOR BOTH ADOPTION AND NON-ADOPTION IDENTIFIED	NO REASONS IDENTIFIED
Game Shooting.	259	37	38	20	5
Nature Reserve / Country Park / Gardens.	26	54	38	0	8
Rough Shooting.	192	41	37	18	4
Village Sports Pitches.	31	39	33	18	10
Educational Facilities.	108	56	28	10	6
Game Fishing.	72	48	26	22	4
Others.	12	58	25	17	0
Facilities for Riding: Gallops, Cross Country Course.	118	51	21	22	6
Coarse Fishing.	150	54	21	19	6
Access Agreements.	55	58	20	18	4
Horses for Riding / Trekking / Lessons.	96	54	18	20	8
Open Farm: Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	76	65	18	13	4
Clay Pigeon Shooting / Gun Club.	108	61	17	17	5
Facilities for Models.	31	74	10	13	3
Laid out Farm Trails / Nature Trails / Cycle Trails.	28	75	10	11	4
Museum.	13	77	8	15	0
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	32	85	7	8	0
Picnic Site.	33	76	6	9	9
Golf Course / Driving Range / Crazy Golf / Pitching.	19	79	5	16	0
War Games / Paintballing.	13	77	0	15	8
Adventure Play Area / Children's Play Area.	21	76	0	10	14
Catering: Farm Restaurant, Teas, Coffee Shop.	27	92	0	4	4
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	21	90	0	0	10
Farm Birthday Parties.	23	91	0	0	9
Airfield / Gliding / Parachuting.	9	100	0	0	0

Table 6.3. Breakdown of respondents with permanent recreation identifying reasons for adoption and non-adoption, arranged in descending order of proportion identifying reasons for non-adoption by type (Source: Author's survey).

A similar continuum can be seen in relation to farms with temporary recreational activities (Table 6.4) and again different types of activity, such as school visits, are more strongly associated with contested constructions and others, such as motor sport, with accepted constructions. It is interesting to note that both these continua closely mirror those presented in Chapter 5 relating to the average number of activities per farm. Recreation types found to be more commonly associated with a low average number of types (i.e. they tend to be found in isolation) are generally those with higher proportions of operators identifying contested constructions and vice-versa. This reinforces the notion that

constructions are related to commitment to recreation, which is more accurately defined as an interaction between recreation type and the average number of recreational activities. The notion of commitment to recreation is re-inforced by the three following examples:

(a). Farm 424.

Three distinct types of recreational provision exist on Farm 424. First, there are 2 hectares of coarse fishing lakes which were established on river meadow land alongside an existing lake in 1992, and are open throughout the year. Second, there is a clay pigeon shooting facility catering for a maximum of 120 guns per day, which is open to the general public and shooting clubs for two days per week and also for competitions and events. This facility was established in 1968. Third, there is a game shooting syndicate of 20 local people (neighbouring farmers, friends etc) rearing 1300 game birds (ducks and pheasants) annually, for a series of shoots on the farm.

The operator, Mr A, clearly felt that the game shooting syndicate is in some way different to the fishing and clay pigeon shooting facilities. Mr A is a keen shot himself and running the syndicate helps him to support his own hobby. The game shooting syndicate is not financially accounted as an enterprise in its own right, unlike the fishing and clay pigeon shooting enterprises, and as a result Mr A is unsure whether the shoot even breaks even. He is unconcerned though;

"it's just a little syndicate of local people who like to shoot, like me, we each put a bit in each year and enjoy the shooting.....its not like the fishing and clays which are open to anyone." (Mr A Farm 424).

Interestingly, Mr A identified all three forms of recreation on his postal questionnaire return, and completed only the reasons relating to recreational provision. However, Mr A draws a clear distinction between the two 'diversification' activities, which are generating important supplementary income for the farm, and the shooting syndicate which is relatively small scale and comprised of a membership controlled by Mr A. Clearly, the control of membership is crucial and means that Mr A constructs this activity in a very different way to the other recreational activities on the farm.

(b). Farm 632.

Farm 632 has a wide range of recreational activities with the provision of a large 'farm park' which is open to the general public everyday throughout the year. In addition to this, fox hunting, rough shooting and game shooting all take place on the farm. These activities had all taken place on the farm for many years. Indeed, Mrs J, one of the operators who had grown up on the farm, could remember hunting taking place over 30 years ago. None of these activities raise any additional income for the farm business and they do not interfere with the agricultural operations of the farm, although they fulfil important leisure, social and cultural roles for Mrs J and her husband. These traditional countryside field sports involving "real country people" are an important part of Mr and Mrs J's social calendar.

The constructions of Mrs J highlight a definite distinction between recreational provision for the general public and recreational activities exclusive to the farming/associated community. She clearly views these activities as highly traditional and definitely not a form of diversification, unlike the farm park. This confirms the way an individual can hold a variety of different constructions relating to different activities.

(c). Farm 726.

Mrs Y provides educational farm tours for children from local primary schools. These occur on a regular basis throughout the year and focus on the farm milking parlour. The farm tours do not conflict with any of the agricultural activities of the farm business or absorb a significant amount of Mrs Y's time. Mrs Y felt strongly about the importance of educating young children about the realities of farming activities;

"you've got to catch them young before they've been brainwashed into thinking that farming is destroying the countryside" (Mrs Y Farm 726).

Mrs Y was adamant that what she is doing is not a form of farm diversification or recreation because it does not raise any income; nevertheless, she felt that it is still an extremely valuable and important activity and one which does not receive the publicity (in the farming or national press) that it deserves.

A dominant construction of farm-based recreation emerges from these examples. Farm-based recreation is constructed by farmers as a form of farm diversification which usually involves dealing with the general public, some sort of change in farming operations, a significant time commitment on behalf of the operator and the generation of extra income. However, a whole farming 'culture' of recreational provision clearly emerges alongside the 'diversification' provision of recreation. These activities are often highly traditional, do not generate any significant financial return, are often used by people in the farming community or by local people or local groups (in many cases they are linked with a personal involvement on the part of a member of the farm business), often require a relatively low commitment in terms of farm land, labour and capital and are not in competition with or impact upon the agricultural operations of the farm. This highlights the value of the ethnographic case studies in exploring farmers' constructions of farm-based recreation and also illustrates that such constructions reflect not only category-type of recreational provision but also more specific characteristics of the activities. Consequently, it is necessary to consider the implications of this for the rest of this research (6.2).

TEMPORARY RECREATION TYPE	FARMS (N)	% OF FARMS WITH TEMPORARY PROVISION			
		REASONS FOR ADOPTION IDENTIFIED	REASONS FOR NON- ADOPTION IDENTIFIED	REASONS FOR BOTH ADOPTION AND NON- ADOPTION IDENTIFIED	NO REASONS IDENTIFIED
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	20	25	55	15	5
School Visits, College Visits.	13	15	54	23	8
Other Types.	2	0	50	0	50
Sheep Dog Trials.	21	38	43	14	5
Ploughing Matches.	33	46	36	12	6
Farm Open Days: Demonstrations, Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	189	50	31	14	5
Concerts / Fairgrounds / Circus.	12	50	25	17	8
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	50	42	22	20	16
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	5	60	20	0	20
Motor Sport.	40	73	18	9	0
Organised Group Visits (Caravan Rallies / Group Camps).	72	64	14	14	8
Machinery Rallies.	15	60	7	20	13
Historic Battle Re-enactments.	4	100	0	0	0

Table 6.4. Breakdown of respondents with temporary recreation identifying reasons for adoption and non-adoption, arranged in descending order of proportion identifying reasons for non-adoption by type (Source: Author's survey).

(iv). FARMERS' CONSTRUCTIONS AND LOCATION.

A geographical dimension appears to be present in farmers' constructions of recreation (Table 6.5), although this may, in part, reflect the geographical variations in recreation category-type provision observed in Chapter 5. The county of Gwynedd exhibits the highest proportion (60%) of respondents with some form of recreation completing reasons for non-adoption (contested constructions). In contrast, farmers in Kent appear to accept more readily the construction of recreational activities in the questionnaire, with only 36% of respondents having some form of recreation giving reasons relating to non-adoption. This may reflect a higher proportion of financially-motivated recreational provision in this county (See Chapter 7). Of particular note are the high levels of respondents with recreation in Gloucestershire, Hertfordshire, and Kent completing factors relating to both adoption and non-adoption of recreation. It is interesting to observe that these three counties have the highest response rates and highest levels of recreation. This may reflect a very high

proportion of respondents with relatively low commitments to recreation who have completed both sections.

COUNTY	FARMS WITH SOME FORM OF RECREATION (N)	% OF FARMS			
		REASONS FOR ADOPTION IDENTIFIED	REASONS FOR NON-ADOPTION IDENTIFIED	REASONS FOR BOTH ADOPTION AND NON-ADOPTION IDENTIFIED	NO REASONS IDENTIFIED
GWYNEDD	87	28	60	7	5
HUMBERSIDE	148	26	57	10	7
DURHAM	121	34	52	9	5
GLOUCESTERSHIRE	164	29	49	14	8
CHESHIRE	115	37	48	8	7
LEICESTERSHIRE	147	37	48	10	5
HERTFORDSHIRE	193	37	43	17	3
KENT	179	40	36	18	6

Table 6.5. Geographical variations in farmers' constructions of recreational activities (arranged in descending order of proportion of responding farms with some form of recreation expressing reasons for non-adoption) (Source: Author's survey).

6.2. The Implications of Farmers' Constructions for Research.

Farmers' constructions of recreation have implications both for the interpretation of previous research and, importantly, for the subsequent analysis in this research project.

(i). THE IMPLICATIONS OF FARMERS' CONSTRUCTIONS FOR THE INTERPRETATION OF PREVIOUS RESEARCH.

The term farm-based recreation has been employed widely in a range of agricultural research. The bodies of literature encompassing farm diversification and pluriactivity both use the term extensively. It is clear from the preceding discussion that farmers generally equate the term 'farm-based recreation' with some form of on-farm diversification (and therefore part of pluriactivity). As a result, these studies are likely to reflect accurately the provision of recreation as a farm diversification enterprise, although it will be influenced by the type of methodology that they employ.

Ironically, though, the term farm-based recreation was first used in the groundbreaking research of DART (1974) and Bull and Wibberley (1976). These recreation-specific studies encompassed a much broader focus which included all forms of recreational provision. Of course, these studies took place at a time when the policy focus was strongly on increasing

agricultural production and the notion of farm diversification was not widely promoted. It is evident from these studies that the majority of recreational provision at this time was comprised of many of the types of recreation highlighted in this study as '*cultural recreation*', although some of them made important economic contributions to farm businesses at that time.

The policy and research focus on farm diversification which started in the mid-1980s (for example the FDGS began in 1988), accompanied by the development of a wealth of novel farm-based activities, appears to have led to many 'cultural' activities being neglected in contemporary research. In addition, it may be the case that farmers' constructions of recreation have changed as a result of this emphasis as well. Nonetheless, a very significant provision of '*cultural recreation*' still exists. There are four points to note in relation to this provision. Firstly, it has been almost completely absent from academic research since the recreation specific studies of the mid-1970s. Secondly, it encompasses many of the same types of recreation as '*diversification recreation*'. As a result, a certain type of recreation, such as coarse fishing, may be constructed as '*diversification recreation*' on one farm and '*cultural recreation*' on another. Unlike virtually every other component of pluriactivity (for example, an off-farm job), the term farm-based recreation is far less self-explanatory. Yet, it is implicit in much of this literature that the term is self-defining (Chapter 1). Thirdly, while many of these farming culture activities do not generate significant financial returns, they can make a small economic contribution to many farm businesses. In addition, they may have tangential benefits such as pest control, an important value as an educational resource, play an important role in the social and leisure activities of the farm household, provide a significant provision of recreation for 'local' individuals and groups, and represent an opportunity to utilise resources which cannot be used for anything else or alternatively activities which do not conflict with agricultural production. Fourthly, these activities may provide a reservoir of experience and a testing ground for activities which may become '*diversification recreation*' in the future. The concept of this transition is one which has seldom been identified before and will be explored in Chapter 8.

(ii). THE IMPLICATIONS OF FARMERS' CONSTRUCTIONS FOR THIS RESEARCH.

As a result of farmers' constructions it is necessary to question whether the incidence of recreation recorded in the sample is accurate. It has already been shown that over half of the farmers who identified some form of recreational provision had different constructions of recreation to those put forward in the questionnaire. This raises the question as to how many responding farmers who stated that they did not have any recreational provision

actually did have some but have not identified this on the questionnaire. The postal questionnaire and accompanying letter both emphasized the breadth of the research and its interest in all forms of recreational provision. As such, the questionnaire was structured to try to capture all forms of recreational provision and in doing so be as inclusive as possible. However, those respondents glancing at the title of the research, 'farm-based recreation', without reading the accompanying letter, may have based their constructions of the contents and purpose of the questionnaire on this phrase. As a result, it is possible that the postal questionnaire survey still under-represents the incidence of recreational activities on farms and especially those 'cultural' ones.

The postal questionnaire survey maintained anonymity and so it is not possible to follow-up non-recreation declaring respondents to see if they did, in fact, have some form of recreation. Reassuringly, though, the relatively high level of response achieved by the postal questionnaire survey (57%), the very high incidence of recreation recorded by the survey relative to those recorded by previous research, and the high proportion of respondents with recreation who have clearly over-ruled the construction of recreation put forward in the postal questionnaire survey tends to suggest that the postal questionnaire survey has more successfully elicited the extent of recreational provision on farms than much of the previous research.

The ethnographic case studies provide an opportunity to explore the difficulties and interpretations which individuals experienced with the postal questionnaire, although they cannot be regarded as any verification of the whole sample. This reveals that two out of the twenty farms did in fact have more recreational provision than they had identified in their responses to the postal questionnaire survey. The following case illustrates the extent to which the recreational provision recorded by the postal questionnaire survey may under-represent the true extent of recreational provision:

(a). Farm 627.

On Farm 627, the only forms of recreational provision identified in the postal questionnaire survey were riding for personal use and the provision of fishing for a private club. On speaking to Mr P, who had completed the postal questionnaire survey originally, it transpired that several other forms of recreation took place on the farm. A sponsored ride in aid of the Church takes place each year, a group of metal detecting enthusiasts visit the farm 3 or 4 times a year to pursue their hobby and a small game shooting syndicate (involving 12 people this year), of which Mr P is one, also operates on the farm.

Further discussion revealed that Mr P had simply forgotten about the metal detecting when

he had completed the form. The other activities involved local people, who were all known personally by Mr P. Further questioning about why he had not identified the game shooting syndicate on the postal questionnaire survey elicited the response;

*"it's just a hobby really, only me and a few friends, I don't do it to make any money.....it never occurred to me that you would be interested in that".
(Mr P Farm 627).*

This case highlights the fact that a proportion of farms with recreational provision may have under-represented their provision when completing the postal questionnaire survey, despite the careful design of the survey to try to avoid this problem. The evidence from the ethnographic case studies suggests that this under-representation corresponds closely to the provision of 'farming culture' recreation.

The representativeness of those with accepted constructions relative to the sample as a whole is another implication of farmers' constructions of recreation. The preceding analysis, and Figure 6.1, highlights the fact that only 546 (395 + 151, 47%) of the farms with some form of recreational provision actually identified the key reasons for their development. It has already been shown that different categories and types of recreational provision are relatively over- or under-represented in this sub-sample relative to the total 1,161 farms with some form of recreational provision.

The implication is that any analysis of the key reasons for recreational provision has to be based on this sub-set and is not, therefore, representative of the recreational provision of the sample as a whole. Instead, it is biased towards the reasons expressed for recreational provision by those categories and types of recreational provision which are over-represented in the sub-set relative to the sample as a whole.

Where more than 47% of the farms with a given category of recreation have identified key reasons for recreational provision, these will be over-represented in the analysis relative to the farms with recreational provision in the sample as a whole and vice-versa. The extent of this representativeness is illustrated in Figure 6.2. Farms with recreational provision for personal use only are most under-represented amongst those farms identifying reasons for recreational provision relative to their incidence in the sample as a whole (48% representative, numerically). Farms with only temporary recreational provision are also highly under-represented (53%). In contrast, farms with a combination of permanent, temporary and personal recreational provision are heavily over-represented in the group identifying reasons for adoption (165%).

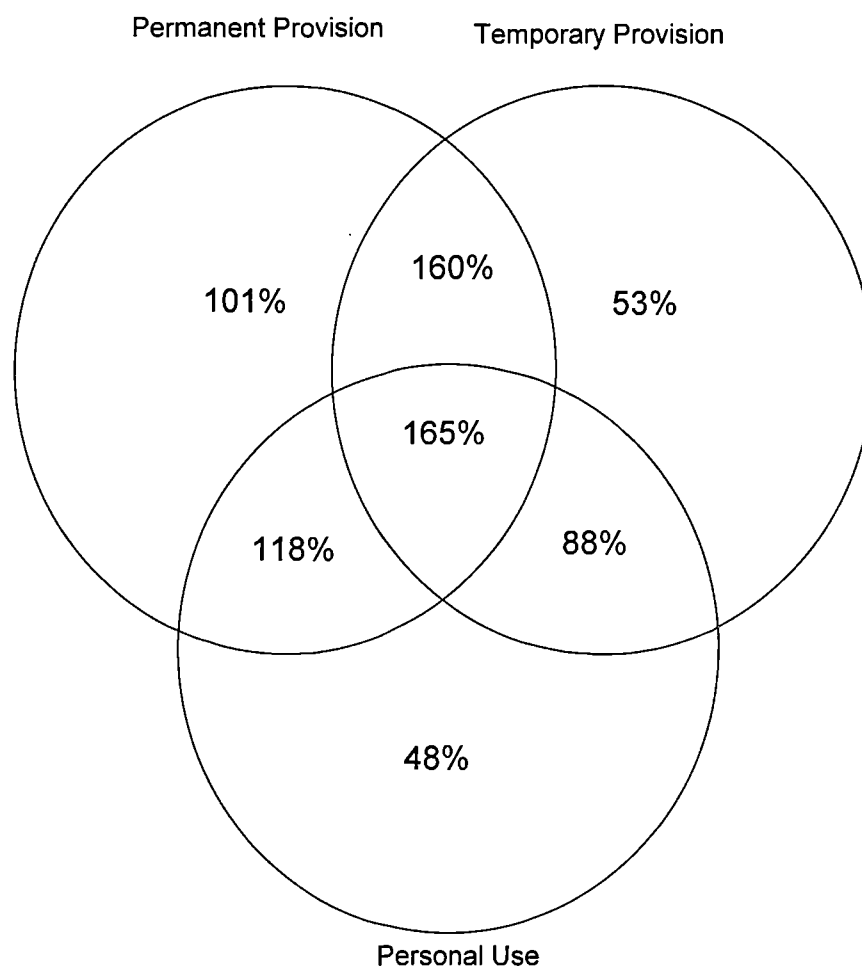


Figure 6.2. The relative representativeness of recreational provision, by category, on farms identifying reasons for recreational provision compared to the incidence of recreational provision in the sample as a whole. (Source: Author's survey).

The exploration of farmers' constructions of recreation presented in this chapter provides an indispensable context to the subsequent analysis and the interpretation of the results relating to both the adopters (Chapters 7-9) and non-adopters (Chapter 10).

6.3. Summary.

This chapter has detailed the results and analysis relating to farmers' constructions of farm-based recreation. The analysis is predominantly of a quantitative nature based on the postal questionnaire survey and has sought indirect explanations for farmers' constructions of recreational activities. Cameos from the ethnographic case studies have been used for illustrative purposes to indicate the complexity of these constructions.

1. The majority (61%) of the postal questionnaire survey respondents with recreational provision (all forms) appeared to think that the recreational provision on their farms was not the same as the 'farm-based recreation' with which the questionnaire was concerned. They contested the construction of recreation put forward in the questionnaire and completed the section relating to the reasons why they didn't provide recreation.
 2. The extent to which farmers' contest/accept the construction of farm-based recreation varies as a function of combinations of category and type of provision. The results of the postal questionnaire survey provide a relative indication of the association between different categories and types of recreation and contested and accepted constructions. The ethnographic case studies permit a more flexible exploration of farmers' constructions of recreation.
 3. Two broad groups of recreation, each with distinctive characteristics, begin to emerge as a result of the analysis of farmers' constructions. These can be referred to as '*diversification recreation*' and '*cultural recreation*'.
 4. Farmers' constructions of farm-based recreation highlight the significant provision of cultural recreation which has been neglected by contemporary research preoccupied with pluriactivity and farm diversification. This provides a strong justification for this research approach. The implications of farmers' constructions of farm-based recreation for the subsequent analysis of the postal questionnaire survey data have also been outlined.
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7. INITIATION OF RECREATIONAL PROVISION.

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The analyses in this chapter, and the subsequent chapter, focus on the recreational activities themselves. This chapter explores the initiation of recreational provision, the first of the three recreational provision outcomes identified in Chapter 3 (along with operation and evolution). Initiation forms a separate chapter reflecting events which happened at some (variable) time in the past. Chapter 8 covers the operation and evolution outcomes which are 'current' to the farm household and business, explaining why they are dealt with subsequently.

The discussion is divided into three sections. The first presents an insight into the basic nature and scale of recreational provision on farms. The second is dedicated to motives for recreational provision, a key element in the initiation of recreation, and the third examines six distinct elements corresponding to the initiation process. The analysis employs quantitative data from the postal questionnaire survey and quantitative and qualitative data from the ethnographic interviews. Complexity meant that many issues were unsuitable for inclusion in the postal questionnaire survey, illustrating the value of employing two complementary methodologies. Each section uses quantitative analysis first which puts forward the results derived from either the postal questionnaire survey sample or farm and enterprise level data from the ethnographic interviews. A range of frequency counts and percentage figures are employed to highlight broad trends associated with recreational provision at the farm and enterprise level. These permit the generation of indirect explanations for trends associated with the process of recreation initiation. The analysis then moves to more detailed qualitative examination of the ethnographic case studies. This employs quotes, cameos and specific case studies and seeks direct explanations.

7.1. Basic Characteristics of Recreational provision.

Before focusing on the motives for initiating recreational provision, it is necessary to elucidate the basic characteristics of recreational provision. A first sub-section presents the nature and scale of recreational provision whilst a second concentrates on the vintage of recreational provision. They provide an invaluable context for a better understanding of the diversity of recreational provision.

(i). NATURE AND SCALE OF RECREATIONAL PROVISION.

Recreational provision takes a wide range of different forms. This sub-section of the analysis presents an introduction to the nature and scale of different types of recreation. This generates a useful illustrative context for the subsequent analysis and translates the

use of categories and types of recreational provision, as developed in Chapter 4 and employed in the previous analysis, into operational 'on the ground' outcomes. This aids considerably any understanding of these activities and highlights the value of the ethnographic case study approach to complex recreational provision. The discussion is descriptive and is comprised of five case study tables which have been selected to provide an illustration of the variety of farm level engagements with recreational provision, reflecting a range of positions on the continuum outlined in Chapter 1, from a very high commitment to recreation to a minimal commitment. Engagement is not determined solely by the specific number of activities, as highlighted earlier, but by the nature of the activities, their interaction and scale.

(a). Farm 87. Very high engagement.

This farm is a 240 hectare owner-occupied holding in the county of Gwynedd. Agricultural production is beef and sheep, with 1,000 head of pedigree Lleyn sheep and 100 Welsh Black cattle. The farm has a very high engagement with recreational provision consisting of nine different types of recreation. It highlights the juxtaposition of a variety of very different types of recreational provision on the same holding. However, there are farms with numerically more activities (the postal questionnaire showed 17 on one farm) but this example shows the depth of commitment that can be expected.

CATEGORY OF RECREATIONAL PROVISION	TYPE OF RECREATIONAL PROVISION	NATURE AND SCALE
OPEN TO GENERAL PUBLIC	CLAY PIGEON SHOOTING	2 traps, available to general public as part of farm activity park. Open daily April-October.
OPEN TO GENERAL PUBLIC	COARSE FISHING	1 hectare constructed lake, 20 swims, heavily stocked, available to general public for day ticket fishing. Open daily April-October.
OPEN TO GENERAL PUBLIC	CATERING	Large 'log cabin' serves as cafe with seating for 30+, shop and admission point for farm activity park. Open daily April-October.
OPEN TO GENERAL PUBLIC	MOTOR SPORT	Quad bikes. Quad bike trekking on a five mile trail around farm boundary and field margins (18 quads). Open daily April-October as part of farm activity park.
OPEN TO GENERAL PUBLIC	MOTOR SPORT	Go-karts. 600 metre club standard tarmac go-kart track and 15 go-karts, crash barriers, safety equipment, lighting for evening use. Open daily April-October as part of farm activity park.
OPEN TO GENERAL PUBLIC	PICNIC SITE	Outdoor picnic tables and chairs for 50 people, BBQ facilities.
BY ARRANGEMENT	NATURE RESERVE	Small nature reserve (1ha) available to local groups by arrangement.
BY ARRANGEMENT	FARM BIRTHDAY PARTIES	Available by arrangement and catered for by all facilities on site.
CLUBS AND SYNDICATES	GAME SHOOTING	Private syndicate, 25 local people, rearing and releasing 1000 game birds per annum.

Table 7.1. The recreational provision of Farm 87 (Source: Author's survey).

(b). Farm 173. High engagement.

A 145 hectare beef and sheep holding located in the county of Durham, which has 4 different categories of recreation comprising 12 different types of recreational provision. These have

different roles within the business ranging from income generation to fulfillment of altruistic motives. Nevertheless, although this farm has more activities than the previous example, the level of engagement is less in terms of scale and intensity.

CATEGORY OF RECREATIONAL PROVISION	TYPE OF RECREATIONAL PROVISION	NATURE AND SCALE
OPEN TO GENERAL PUBLIC	NATURE RESERVE	Small area of newly planted woodland
OPEN TO GENERAL PUBLIC	HORSES FOR RIDING	Riding stables with 6 horses available for lessons/hacks, also linked to farm accommodation.
OPEN TO GENERAL PUBLIC	FACILITIES FOR RIDING	Cross-country course (4 miles of gallops and jumps) around farm.
OPEN TO GENERAL PUBLIC	PICNIC SITE	Small site linked to access and accommodation on the farm.
OPEN TO GENERAL PUBLIC	ACCESS AGREEMENTS	Countryside Stewardship (Access tier).
OPEN TO GENERAL PUBLIC	LAID OUT FARM TRAIL	3 mile waymarked trail with interpretation boards and leaflet.
BY ARRANGEMENT	ROUGH SHOOTING	Small number of known 'locals' on an occasional basis.
BY ARRANGEMENT	CLAY PIGEON SHOOTING	Traps, guns and protective clothing. Linked to accommodation on the farm.
BY ARRANGEMENT	EDUCATIONAL FACILITIES	Classroom facility and materials available for school groups. 20 classes per year.
CLUBS AND SYNDICATES	GAME FISHING	Private syndicate, 10 members, on 0.5 mile of river, also linked to farm accommodation.
TEMPORARY	SHEEP DOG TRIALS	Venue for local sheep dog trial, one day per year. 15-20 competitors and about 150 spectators.
TEMPORARY	FARM OPEN DAYS	Farm open for one weekend each year, approx. 300 visitors.

Table 7.2. The recreational provision of Farm 173 (Source: Author's survey).

(c). Farm 424. Moderate engagement.

Farm 424 is a 135 hectare mixed arable (100 ha) and sheep (100 head) holding in Leicestershire. The farm is owner-occupied and has a variety of different types of recreational provision. It has fewer individual types than the previous example, so helps to highlight the scale variability which exists between the same types of activities occurring on different holdings.

CATEGORY OF RECREATIONAL PROVISION	TYPE OF RECREATIONAL PROVISION	NATURE AND SCALE
OPEN TO GENERAL PUBLIC	CLAY PIGEON SHOOTING	Wide range of traps for shooting different competitive clay disciplines and club house. Maximum 120 guns per day. Open Wednesdays and every other weekend.
OPEN TO GENERAL PUBLIC	COARSE FISHING	120 pegs, 40 on river, rest on 4ha of constructed lakes, open daily all year for day ticket fishing.
CLUBS AND SYNDICATES	GAME SHOOTING	Private syndicate, 15 people including Mr B, rearing and releasing 1300 game birds per year.
TEMPORARY	PLOUGHING MATCHES	Annual ploughing match under auspices of local farmers group, approximately 30 competitors and 100 spectators.

Table 7.3. The recreational provision of Farm 424 (Source: Author's survey).

(d). Farm 856. Low engagement.

This is a 360 hectare arable holding in the county of Hertfordshire. The farm is owner-occupied and has a low commitment to recreation. Nonetheless, it still has a total of 5 different activities, 1 more than (c). However, provision is dominated by farming 'culture' type activities and contact with the public through recreation is limited to temporary activities for which little charge is made, illustrating the diversity of recreation.

CATEGORY OF RECREATIONAL PROVISION	TYPE OF RECREATIONAL PROVISION	NATURE AND SCALE
TEMPORARY	FARM OPEN DAYS	Farm open to the general public one weekend per year, 2-300 visitors.
TEMPORARY	RIDING EVENTS	Annual gymkhana, one day, approx. 1000 competitors and spectators.
PERSONAL USE	HORSES FOR RIDING	2 horses for family use.
PERSONAL USE	ROUGH SHOOTING	Rough shooting on farm for family.
PERSONAL USE	CLAY PIGEON SHOOTING	Clay shooting trap on farm for family.

Table 7.4. The recreational provision of Farm 856 (Source: Author's survey).

(e). Farm 991. Minimal engagement.

This farm is a 240 hectare horticultural holding growing mainly root crop vegetables in the county of Hertfordshire. The farm has a minimal commitment to recreation approaching a point close to non-engagement. It illustrates a level of engagement which has been largely ignored by previous research. There will be cases of engagement with even less recreation than this example.

CATEGORY OF RECREATIONAL PROVISION	TYPE OF RECREATIONAL PROVISION	NATURE AND SCALE
CLUBS AND SYNDICATES	GAME SHOOTING	Private syndicate of 20, including Mr L, rearing and releasing 500 birds per annum.
PERSONAL USE	ROUGH SHOOTING	Freedom to rough shoot on farm for family and employees.

Table 7.5. The recreational provision of Farm 991 (Source: Author's survey).

(ii). VINTAGE OF RECREATIONAL PROVISION.

The majority of farms with recreational provision responding to the postal questionnaire survey had initiated some recreational provision before 1980 (52%) (Table 7.6). This highlights the long-standing commitment to recreation present on many farms, although it should be remembered that vintage relates to the first recreational provision on the farm, includes recreation for personal use and only relates to farms with current recreational provision. Examining specific combinations of recreational provision highlights some more detailed nuances. For example, considering recreational provision for clubs/syndicates

separately reveals that 57% had started before 1980, whereas only 10% of the farms with these activities had initiated them since 1990. Overall, though, 20% had started recreational provision since 1990. This more than doubles to 43% if farms with recreational provision open to the public without booking only are considered. It appears that although the majority of recreational provision on farms is well-established and is more strongly associated with recreational provision for clubs and syndicates, more recent provision is dominated by a more intensive commitment to recreation open to the public without arrangement reflecting the growth of income orientated recreational provision in response to falling agricultural incomes in recent years, in accordance with the diversification 'boom' of the late-1980s (see Chapter 2).

A notion which is re-inforced when the 84 different recreational activities present on the case study farms (excluding those exclusively for personal use) are examined at the activity level. Here, 26 (31%) had been established before 1980, whereas 43 (51%) were more recent than 1990. This suggests that the responses to the postal questionnaire survey underestimate the proportion of recently initiated recreational activities because they are obscured in the responses by other recreational provision initiated at an earlier date. This simultaneously highlights the limitations of the postal questionnaire methodology in coping with complex multiple recreational provision and the value of the ethnographic case study methodology to tease out these complex farm level differences.

The vintage of recreational provision varies significantly according to county (Figure 7.1). Gwynedd exhibits the highest proportion of farms initiating recreational provision since 1990, apparently reflecting the recent engagement with recreation in response to falling incomes in the livestock sector. In contrast, the counties of Kent, Hertfordshire and Humberside show relatively low levels of recent initiation but the highest rates of initiation between 1980-1989 when they experienced most income pressure and the government was experimenting with measures to limit price support (especially in the cereal sector) and support for diversification. Kent and Hertfordshire in particular have the highest incidences of recreation and the pattern appears to reflect a steady initiation of recreational provision throughout the period rather than a response to recent pressures.

CATEGORY OF PROVISION COMBINATION	RESPONDENTS COMPLETING VINTAGE	VINTAGE (%)		
	N	PRE-1980	1980-1989	1990-1997
OPEN TO THE PUBLIC WITHOUT BOOKING ONLY	28	32	25	43
AVAILABLE BY ARRANGEMENT ONLY	19	42	32	26
CLUBS AND SYNDICATES ONLY	51	57	34	10
COMBINATIONS OF PERMANENT (1+2+3)	31	48	32	19
TOTAL PERMANENT ONLY	129	47	31	22
TEMPORARY ONLY	17	47	35	18
PERSONAL USE ONLY	62	81	11	8
PERMANENT AND TEMPORARY	108	44	37	19
PERMANENT AND PERSONAL	106	49	33	18
TEMPORARY AND PERSONAL	27	44	29	26
PERMANENT AND TEMPORARY AND PERSONAL	79	58	20	22
TOTAL PERMANENT AND TEMPORARY ONLY	254	46	34	20
TOTAL ALL FORMS OF RECREATION	528	52	28	20

Table 7.6. The vintage of recreational provision. (Source: Author's survey).

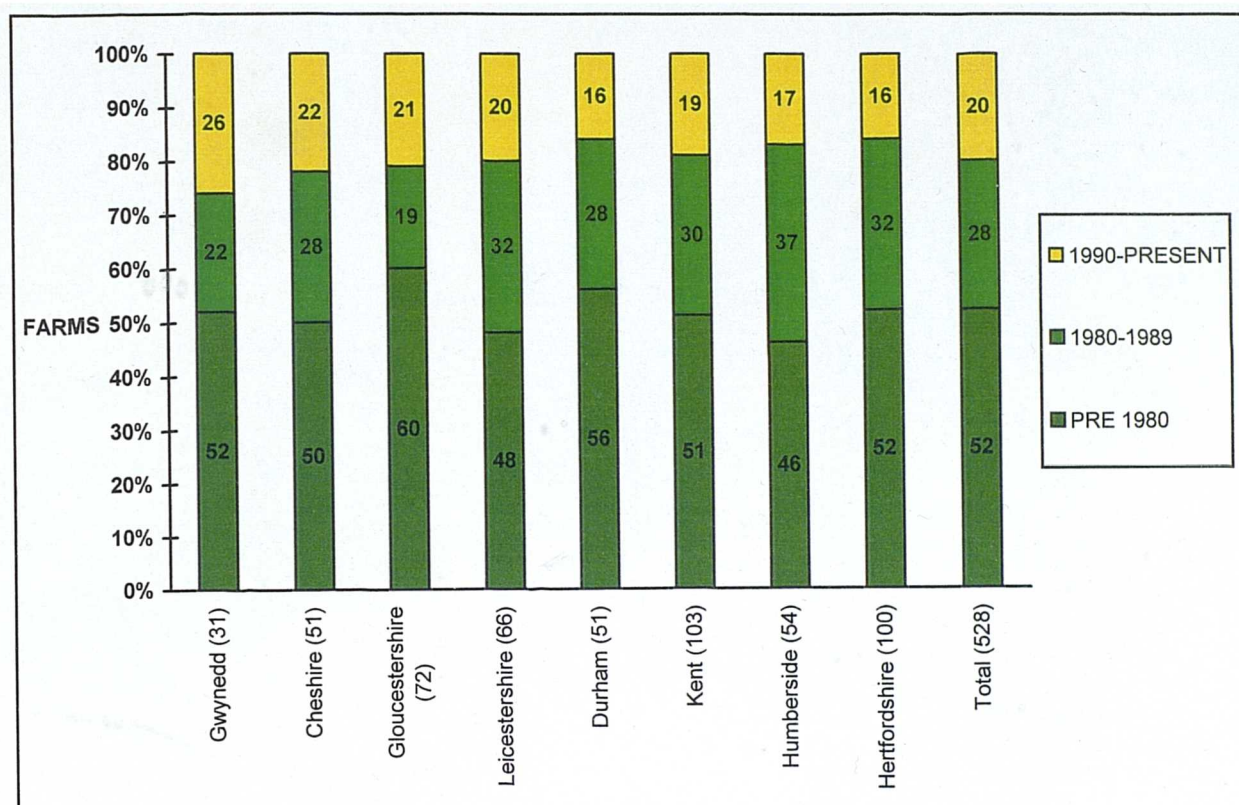


Figure 7.1. Geographical distribution of recreational provision by vintage. (Source: Author's survey).

It is possible to generate a relative picture of the vintage of different types of permanent recreation (Table 7.7). It must be remembered, as already noted, that the vintage ascertained from the postal questionnaire survey relates to the first recreational provision established on the farm. When arranged in order of descending incidence of initiation since 1990, a notable pattern emerges. Certain types of recreation such as catering, rare breeds, golf courses and picnic sites are very strongly associated with recent initiation. These types correspond well with more 'novel' forms of recreation defined as 'diversification' recreation in Chapter 6. In comparison, activities such as rough shooting, game shooting and game fishing are strongly associated with initiation before 1980, reinforcing the notion that these are predominantly 'traditional' activities and correspond well with farming 'culture' recreation.

	RESPONDENTS COMPLETING VINTAGE	VINTAGE (%)		
		PRE 1980	1980-1984	1990- PRESENT
Other types.	9	11	22	67
Catering: Farm Restaurant, Teas, Coffee Shop.	26	4	39	57
Golf Course / Driving Range / Crazy Golf / Pitching.	12	25	25	50
Picnic Site.	28	29	21	50
Nature Reserve / Country Park / Gardens.	14	15	36	49
Adventure Play Area / Children's Play Area.	18	36	17	47
Farm Birthday Parties.	19	21	32	47
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	19	11	42	47
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	26	27	34	39
Museum.	9	44	23	33
Laid out Farm Trails / Nature Trails / Cycle Trails.	24	37	34	29
War Games / Paintballing.	11	37	36	27
Access Agreements.	42	47	29	24
Educational Facilities. School Visits, College Visits.	71	46	30	24
Facilities for Models.	26	54	27	19
Coarse Fishing.	100	56	25	19
Open Farm.	54	56	26	18
Horses for Riding / Trekking / Lessons.	61	52	30	18
Clay Pigeon Shooting / Gun Club.	82	56	27	17
Facilities for Riding: Gallops, Cross Country Course.	79	53	30	17
Village Sports Pitches.	18	79	5	16
Rough Shooting.	107	57	29	14
Game Fishing.	50	58	30	12
Game Shooting.	144	59	29	12
Airfield / Gliding / Parachuting.	9	22	67	11
TOTAL	422	49	29	22

Table 7.7. The vintage of different types of permanent recreational provision. (Source: Author's survey).

The general associations observed in relation to vintage and recreational provision in the postal questionnaire survey appear to apply to specific case studies. Taking the example of Farm 173 from the previous sub-section (Table 7.8), the earliest recreational provision could be traced back to 1960. The two recreational activities initiated before 1980 are both small scale activities which are only available by arrangement or to private clubs and syndicates whereas the recreational activities initiated from the late-1980s onward are typically more widely available to the public and more financially orientated. Yet, this is not always the case. For example, Farm 56 had started a farm restaurant in 1976.

CATEGORY OF RECREATIONAL PROVISION	TYPE OF RECREATIONAL PROVISION	NATURE AND SCALE	VINTAGE
BY ARRANGEMENT	ROUGH SHOOTING	Small number of known 'locals' on an occasional basis.	1960
CLUBS AND SYNDICATES	GAME FISHING	Private syndicate, 10 members, on 0.5 mile of river, also linked to farm accommodation.	1974
OPEN TO GENERAL PUBLIC	NATURE RESERVE	Small area of newly planted woodland	1980
TEMPORARY	SHEEP DOG TRIALS	Venue for local sheep dog trial, one day per year. 15-20 competitors and about 150 spectators.	1982
OPEN TO GENERAL PUBLIC	HORSES FOR RIDING	Riding stables with 6 horses available for lessons/hacks, also linked to farm accommodation.	1988
OPEN TO GENERAL PUBLIC	FACILITIES FOR RIDING	Cross-country course (4 miles of gallops and jumps) around farm.	1990
OPEN TO GENERAL PUBLIC	PICNIC SITE	Small site linked to access and accommodation on the farm.	1991
BY ARRANGEMENT	CLAY PIGEON SHOOTING	Traps, guns and protective clothing. Linked to accommodation on the farm.	1992
OPEN TO GENERAL PUBLIC	ACCESS AGREEMENTS	Countryside Stewardship (Access tier).	1994
TEMPORARY	FARM OPEN DAYS	Farm open for one weekend each year, approx. 300 visitors.	1994
BY ARRANGEMENT	EDUCATIONAL FACILITIES	Classroom facility and materials available for school groups. 20 classes per year.	1994
OPEN TO GENERAL PUBLIC	LAID OUT FARM TRAIL	3 mile waymarked trail with interpretation boards and leaflet.	1994

Table 7.8. The vintage of recreational provision on Farm 173. (Source: Author's survey).

7.2. Motives for Recreational provision.

Farmers' motives are a key element in the initiation of recreation, as highlighted in the conceptual framework put forward in Chapter 3. Analysis of motives has proved analytically useful in the study of farm-based tourism (DART 1974, Evans and Ilbery 1992a). An examination of motives is particularly important because of the wide range of non-financially motivated activities encompassed by farm-based recreation. The discussion is divided into

seven sub-sections. The first presents an overview of the motives for recreational provision. The next five focus in detail on financial, interest, social, altruistic and 'other' motives for recreational provision respectively. Associations between motives and different categories and types of recreational provision are presented. The seventh sub-section explores the geography of motives for recreational provision.

Both quantitative and qualitative data are used to explore motives, and can be divided into two distinct levels. The first presents a primarily quantitative analysis at the aggregate farm level. Indirect associations between motives and recreational provision are advanced based on a range of frequency counts and percentage figures. It must be remembered that the expression of motives (in the postal questionnaire survey) relates to the aggregate recreational provision of the farm and, therefore, where farms have more than one category or type of recreational provision it is not possible to attribute motives directly to specific activities (although it is possible to generate relative measures). In addition, farmers' constructions of recreation may mean that the motives relating to some of their recreational provision are not represented (Chapter 6). The expression of motives at the farm level may conceal the fact that these relate to one activity and that 'other' motives are associated with the provision of another activity on the same farm. Equally, some respondents may have second-guessed why a venture had been initiated by another household member. This highlights the limitations of the postal questionnaire survey and the need for detailed qualitative research to tease out motives relating to specific activities. A requirement which is fulfilled by the second level of analysis which identifies direct associations between motives and recreational provision at the individual activity level. These are generated from detailed qualitative analysis of the ethnographic case studies in the form of illustrative examples which inform the interpretation generated by the quantitative analysis.

(i). AN OVERVIEW OF THE MOTIVES FOR RECREATIONAL PROVISION.

This sub-section presents an overview of motives expressed in relation to the establishment of recreational provision on farms. It includes a justification of the selection of the case study farms on the basis of their farm level motives (the aggregate of motives expressed in relation to all forms of recreational provision on the farm) and then moves beyond the farm level to present an overview of specific motives at the activity level using the case study data.

(a). Aggregate Farm Level Motives.

Generally, it is possible to allocate motives to one of four broad types in accordance with

those established by the DART (1974) study of farm-based recreation; financial, social, interest and altruistic (see Chapter 3). One or more of these motives could be identified in 84% (461) of the 546 surveyed farms with recreational provision which identified reasons for adopting recreation.

Overall, in relation to all forms of recreational provision (including recreation for personal use), interest motives are the most frequently expressed (47% of respondents; Table 7.9). Bull and Wibberley (1976) reported slightly lower levels of farm level interest motivation (42.3%). Financial motives are a close second to interest motives at 42%. A level which is similar to, although surprisingly lower, than that reported by Bull and Wibberley (1976) who identified financial motives in relation to 47.9% of recreational provision (including activities for personal use). Social and altruistic motives are expressed by much lower proportions of the respondents, 18% and 7% respectively. Only 85 (16%) of the respondents identified other motives for establishing recreational provision. However, it is not always possible to classify motives into mutually exclusive types. Further, the farms identifying reasons for recreational provision represent a sub-set of those respondents with recreational provision (for the reasons outlined in Chapter 6). It has already been shown that certain categories and types of recreation are over- and under-represented in this sub-set and this must be borne in mind throughout the analysis.

	FARMS (N)	MOTIVE (%)				
		INTEREST	FINANCIAL	SOCIAL	ALTRUISTIC	OTHER
TOTAL ALL FORMS OF RECREATION	546	47	42	18	7	16

Table 7.9. Motives for recreational provision (many farms expressed more than one motive). (Source: Author's survey).

An examination of individual motives conceals the presence of farms expressing two or more motives for the provision of recreation. The most abundant motives expressed by the responding farms are interest motives only (30%) and financial motives only (23%). Indeed, 24% of the responding farms expressed more than 1 motive in relation to their recreational provision, probably reflecting the high number of farms with more than one type of recreational provision and the varying motives associated with these different types. The most abundant combination of motives is financial and interest (8%) (Table 7.10). Interestingly, Bull and Wibberley (1976) also identified financial and interest motives as the most widespread combination of motives, relating to 14.1% of their activities.

It is clear from the preceding analysis that 50% of the respondents with recreational provision did not express any financial motivation. This abundance of non-financial motives reinforces a fundamental division within the respondents providing recreation. Three distinct groups emerge. First, there are those who express a financial motive for establishing some or all of their recreational provision (42%, including 23% only financial motives and 19% both financial and non-financial motives). Secondly, there are those who express only non-financial motives in relation to their recreational provision (42%). Thirdly, there are those who express other motives for their recreational provision (16%). These three groups encapsulate an interesting dimension for further research and provide the basis for the selection of the ethnographic case studies (see Chapter 4). There are five observations that can be made in relation to the farm level stratification of the sample in this way:

- I. farmers expressing both financial and non-financial motives may represent two distinct groups. They may relate to farms where an active combination of financial and non-financial motives are responsible for the provision of recreation. Alternatively, they may reflect those farms where non-financially motivated recreational activities occur alongside financially motivated recreational provision. The postal questionnaire survey respondents are stratified on a farm basis rather than an activity basis, and as a result it is impossible to distinguish between these scenarios without detailed farm level research;
- II. the identification of financially motivated and non-financially motivated strata reflects the characteristics of the two distinct 'types' of recreation - diversification recreation and cultural recreation - emerging as a result of farmers' constructions of recreation (Chapter 6);
- III. those farmers with different constructions of recreation who did not identify reasons and therefore motives for adoption would almost certainly inflate the numbers in the non-financial pathway (see Chapter 6). As a result, the incidence of non-financially motivated recreational provision is likely to be under-represented amongst those farms expressing motives. In addition, a much lower proportion of those respondents with non-financially motivated provision (18%) and other motives (15%) agreed to be contacted for further research compared to those with financially motivated provision (30%). The random selection of the 20 illustrative ethnographic case studies from these three 'populations' to reflect their relative incidences ensures that all three populations, and therefore a spectrum of motives, are present in subsequent analysis;
- IV. the division of the sample according to motives reflects important farm business-specific orientations. These over-ride generic recreation category and/or type groupings. So, for example, the provision of a small fishing lake for a private club on one farm business

might be financially motivated and important to its continued viability, whereas on another farm business the provision of a similar facility might not be financially motivated and of no consequence to the farm business;

- V. motives do not necessarily remain static over time. There may be a transition between different motives. For example, a farm might establish recreation initially with an interest motive and then discover that it represents a financial opportunity. The transition of motives over time is explored later (see Chapter 8).

MOTIVE COMBINATION	FARMS (N)	FARMS (%)
INTEREST ONLY	164	30
FINANCIAL ONLY	127	23
FINANCIAL AND INTEREST	44	8
FINANCIAL AND SOCIAL	32	6
SOCIAL ONLY	20	4
SOCIAL AND INTEREST	20	4
OTHER COMBINATIONS	20	4
ALTRUISTIC ONLY	16	3
FINANCIAL, SOCIAL AND INTEREST	18	3
TOTAL NON FINANCIAL	232	42
TOTAL FINANCIAL	229	42
TOTAL OTHER MOTIVES	85	16
TOTAL	546	100

Table 7.10. Combinations of motives for recreational provision (includes farms with recreation for personal use). (Source: Author's survey).

(b). Farm Level Categories and Types of Recreational provision and Motives.

The following part presents the results relating to the farm level analysis of motives and categories of recreational provision (Figure 7.2), types of permanent recreation (Figure 7.3) and types of temporary recreational provision (Figure 7.4). These results are employed in the subsequent, more detailed analysis which focuses on each individual motive in turn. The analysis presented here for financial, social, altruistic and other motives for permanent recreation types is based on 478 farms and 235 farms for temporary types. This excludes those farms where the only recreational provision is for personal use. In relation to interest motives, all farms with recreation for personal use are excluded because of the very high correlation between personal use and interest motives. This obscures the expression of interest motives in relation to other forms of recreational provision occurring alongside recreation for personal use (Figure 7.2). The analysis of interest motives is, therefore, based on 263 farms for permanent provision and 127 farms for temporary provision.

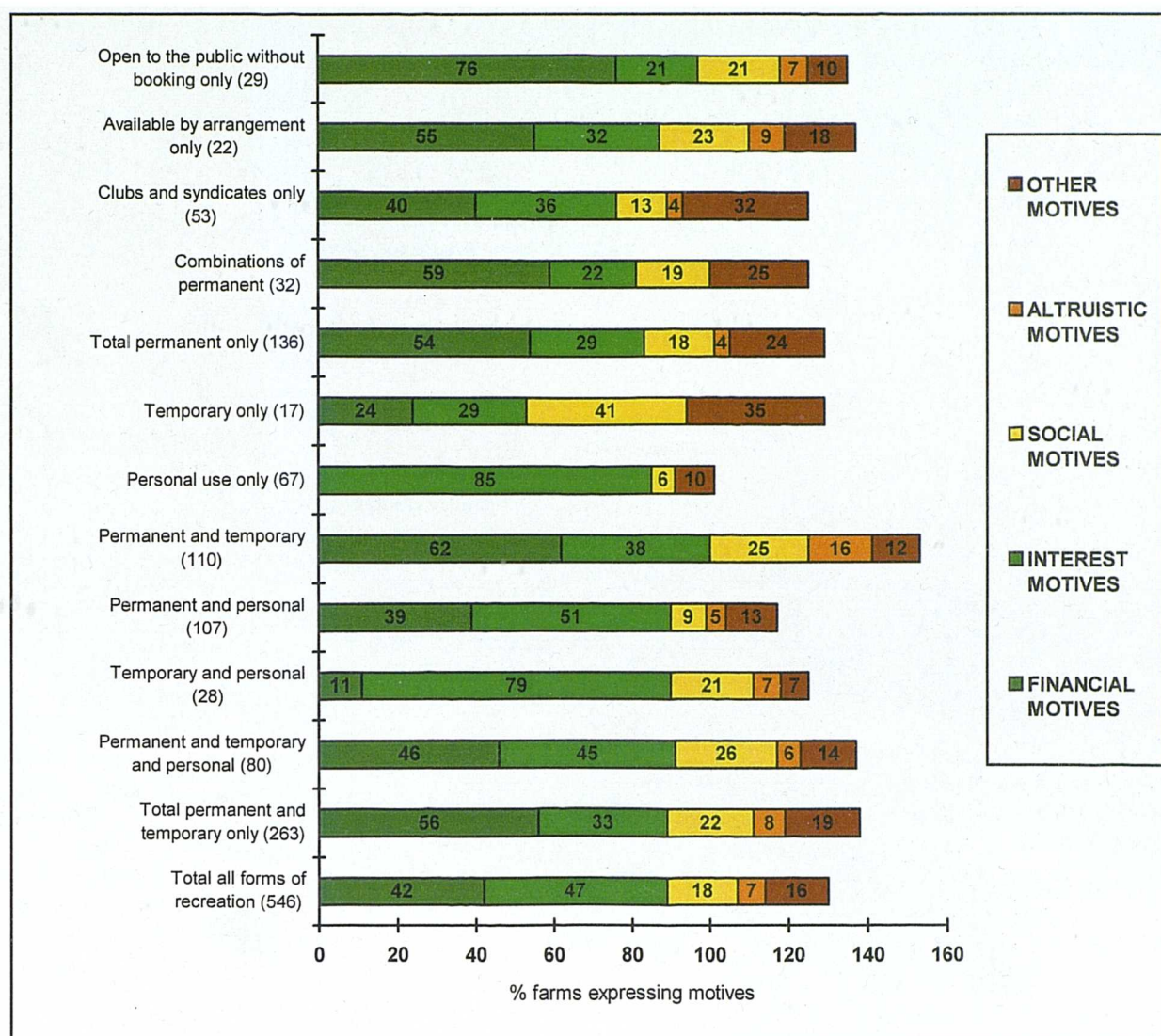


Figure 7.2. Farm level motives for categories of recreational provision (Number of farms) (Source: Author's survey). Totals exceed 100% because respondents express more than 1 motive.

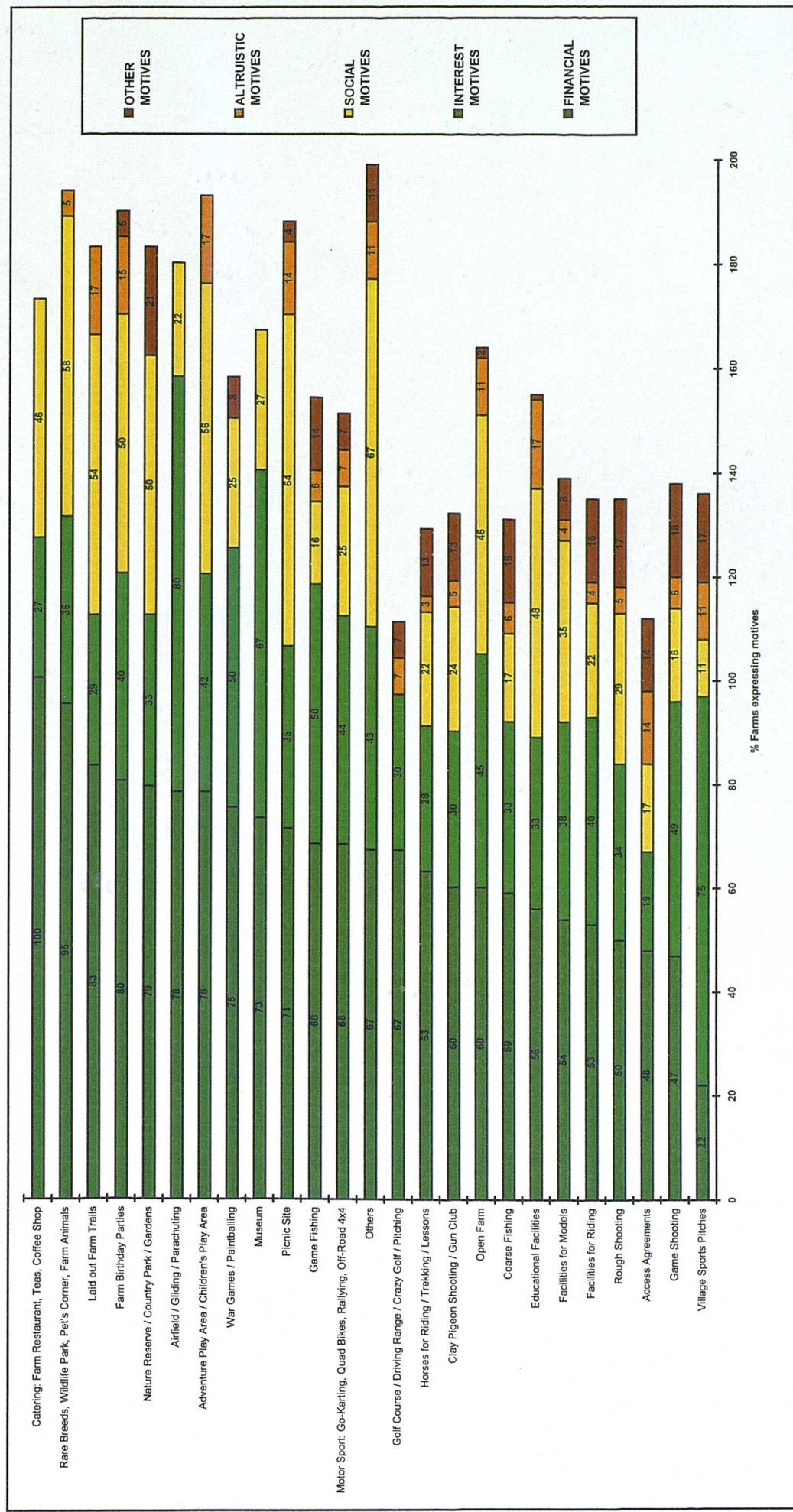


Figure 7.3. Farm level motives for permanent types of recreational provision (Source: Author's survey). Totals exceed 100% because respondents express more than 1 motive.

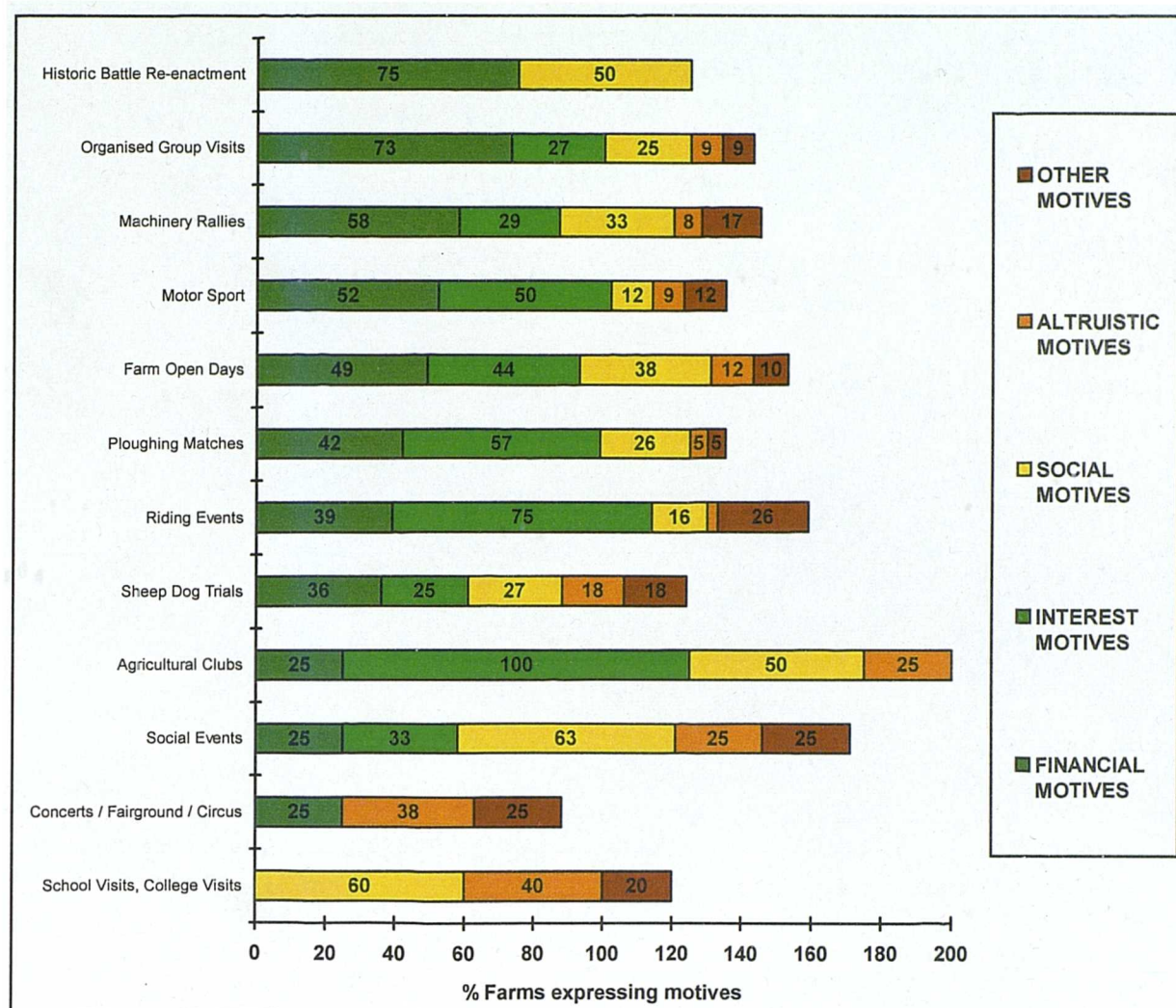


Figure 7.4. Farm level motives for temporary types of recreational provision (Source: Author's survey). Totals exceed 100% because respondents express more than 1 motive.

(c). An Activity Level Overview of Motives.

A focus at the activity level permits a direct association between motives and specific activities. A total of 101 individual activities (including recreation for personal use) is present on the 20 case study farms comprising an average of 5 activities per farm. They range from a single activity on farm 539 to 17 on farm 632. Of these activities, 48% are financially motivated, social motives are expressed in relation to 29% of the activities, with a further 28% interest motivated, 17% altruistically motivated and 13% associated with other motives (Table 7.11).

When compared with the aggregate motives expressed at the farm level, significant

differences emerge. Most notably, 65% of the case study farms identified interest motives, moreover, interest motives are only expressed in relation to 28% of the individual activities. At an activity level this indicates that interest motives may be relatively less important in the provision of recreation than the aggregate level of interest motives would suggest. A similar pattern can also be observed in relation to altruistic motives. There is a large discrepancy between the aggregate expression of altruistic motives in the case study farms and the sample as a whole. Elsewhere, social motives exhibit a slight reversal of the pattern outlined above.

	(N)	MOTIVE (%)				
		INTEREST	FINANCIAL	SOCIAL	ALTRUISTIC	OTHER MOTIVES
ACTIVITY LEVEL (CASE STUDIES)	101	28	48	29	17	13
AGGREGATE FARM LEVEL (CASE STUDIES)	20	65	50	25	55	35

Table 7.11. Activity level motives for recreational provision (many farms expressed more than one motive) (includes recreation for personal use). (Source: Author's survey).

Combinations of motives at the aggregate farm level have already been elucidated (Table 7.10). However, analysis at the farm level does not distinguish between the expression of more than one motive in relation to one specific activity (whether alone or in multiple on one holding) or as a result of multiple activities each with different motives. An exploration of combinations of motives at the activity level illustrates that multiple motives are indeed expressed in relation to the provision of some individual activities (Table 7.12). The most widespread *combination* of motives in relation to specific activities are financial and social, identified with respect to 21 of the individual activities. The combination of financial and social motives in relation to individual recreational activities is particularly interesting and highlights the importance of cultural factors alongside financial ones in the provision of recreation. Table 7.13 provides an illustrative case study of the complexity of motives at the individual activity level in relation to the recreational provision of Farm 530 which comprises 4 different categories of recreational provision encompassing 6 different recreational activities. This highlights the way in which different activities are associated with different motives (and combinations of motives) and, importantly, how aggregate farm level motives conceal the expression of specific motives in relation to individual activities. Financial, social, interest and altruistic motives are all expressed by Farm 530, yet no more than 2 of these correspond to any one of the 6 individual types of recreational provision present.

MOTIVE COMBINATION	ACTIVITIES (N)
FINANCIAL ONLY	21
INTEREST ONLY	21
FINANCIAL AND SOCIAL	21
ALTRUISTIC ONLY	15
FINANCIAL AND INTEREST	3
SOCIAL AND INTEREST	3
OTHER COMBINATIONS	3
SOCIAL ONLY	1
FINANCIAL, SOCIAL AND INTEREST	1
TOTAL NON FINANCIAL	40
TOTAL FINANCIAL	48
TOTAL OTHER MOTIVES	12
TOTAL (CASE STUDIES)	101

Table 7.12. Activity level combinations of motives for recreational provision (includes recreation for personal use). (Source: Author's survey).

CATEGORY OF PROVISION	TYPE OF PROVISION	DESCRIPTION	MOTIVE(S)
OPEN TO THE PUBLIC	LAID OUT FARM TRAILS	1 mile trail with interpretation information.	ALTRUISTIC
OPEN TO THE PUBLIC	ACCESS AGREEMENTS	Countryside Stewardship (access tier).	FINANCIAL
BY ARRANGEMENT	COARSE FISHING	2 hectare lake available for match bookings.	FINANCIAL
PERSONAL USE	ROUGH SHOOTING	Rough shooting on farm for family.	INTEREST
TEMPORARY	PLOUGHING MATCHES	Annual regional ploughing championships, approximately 60 competitors and 1000 spectators.	INTEREST AND SOCIAL
TEMPORARY	FARM OPEN DAYS	Open to the general public for one weekend during lambing time, approximately 400 visitors.	ALTRUISTIC
TOTAL (FARM LEVEL)	6 Types.		FINANCIAL (x2), INTEREST (x2), SOCIAL (x1) AND ALTRUISTIC (x2).

Table 7.13. The activity level recreational provision and associated motives of Farm 530. (Source: Author's survey).

(ii). FINANCIALLY MOTIVATED RECREATIONAL PROVISION.

Of the 546 farms with some form of recreation who completed the section identifying reasons for the adoption of recreation, 229 (42%) identified financial motives. Financial motives were not an overwhelming consideration in the provision of many recreational activities, especially as the financially motivated fraction corresponds to those farms

identifying reasons for adopting recreation and not all the farms with recreation (Chapter 6). Having said this, in some cases, financial motives are very important. A view which is highlighted by these two unsolicited comments received in the postal questionnaire survey:

"looking to the future and fear the withdrawal of support" (Farm 173).
"charge silly question why else do it?" (Farm 530).

Given farmers' constructions of recreation explored in Chapter 6, it would appear likely that those with recreation who did not identify reasons for its adoption are not generally financially motivated. This would mean that financial motives are likely to be over-represented in the sample. As a result of farmers' constructions, it is also extremely difficult to make direct comparisons between this figure and those reported by previous research. Overall, financially motivated recreational provision represents only 12% of all the responding farms. Expressed in this way, the financially motivated fraction is much more in keeping with many of the previous estimates of the incidence of recreation, particularly the more contemporary studies of farm diversification and pluriactivity which have typically put forward levels of recreation incidence between 10% and 15% of farms (Arkleton Trust 1992, Bateman and Ray 1994, Ilbery *et al* 1996). A fact which confirms that these studies have focused on financially motivated recreational provision.

When disaggregated according to category of provision combinations, financially motivated farms comprise 222 farms with some form of permanent recreational provision (105 also have temporary recreational provision) and 7 farms solely with provision for temporary recreational events/visits (see Figure 7.5). Financial motives are most strongly associated with farms with permanent recreational provision (54%), falling to 24% of farms with temporary recreational provision and, unsurprisingly, none of the farms where the only recreational provision is for personal use expressed financial motives.

A focus on farms with only permanent recreational provision reveals further associations between income motives and specific categories of provision. A strong link exists between recreational provision which is open to the public without booking and a financial pathway (Figure 7.2). It is here that there is the strongest association with a financial motive present in the sample (76%). Analysis at the individual activity level confirms this relationship. Over 87% of the operators of activities in this category identified financial motives. In contrast, the financial motivation associated with recreation available by arrangement only is appreciably lower at 55% (58% at the activity level) and for recreational provision for clubs and syndicates it is lower still at 40% (15% at the activity level).

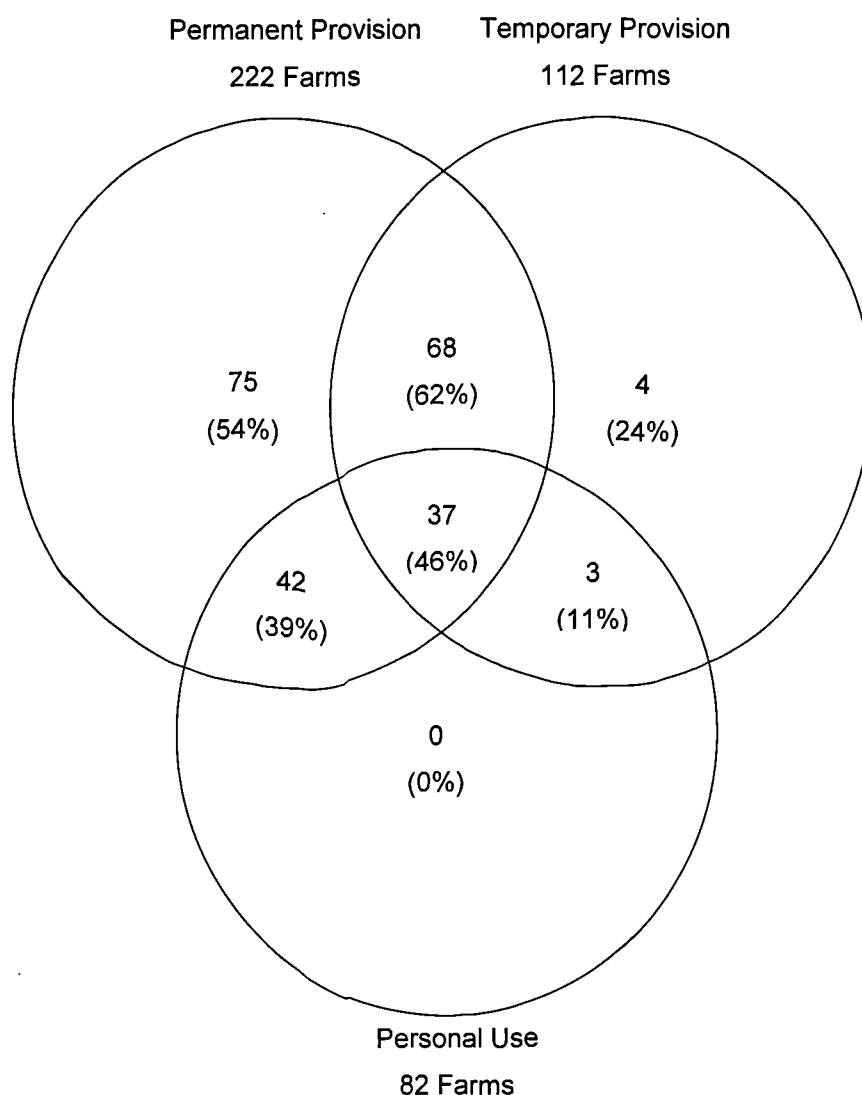


Figure 7.5. Number of farms with financially motivated recreational provision by category of provision combinations (Percentage of farms) (Source: Author's survey).

There is a clear relationship between the expression of a financial motive and specific types of permanent recreational provision (Figure 7.3) providing an insight into the relationships between different types of recreational provision and financial motives. Nevertheless, it should be remembered that, because the majority of farms have more than one type of recreational provision, it is impossible to ascribe financial motives identified at the farm scale in the postal questionnaire survey directly to an individual activity. For example, although 83% of farms with farm trails express financial motives, it is not possible to determine the extent to which it is the trails themselves that are financially motivated. The same observation can be applied to activities at the bottom of the table. Of the farms with rough shooting, 50% express financial motives, but it is possible that all these farms have other

types of recreation which were financially motivated and that, in fact, the presence of rough shooting was purely incidental. Analysis at the activity level tends to confirm these observations. Financial motives are identified only in relation to 2 out of the 4 laid out farm trails and 1 out of the 7 rough shooting activities in the case studies. Nonetheless, the farm level aggregate figures from the postal questionnaire survey permit a ranking of different types of recreation relative to one another and, therefore, provide a good basis for comparison between types. The example of Mr F highlights some of the associations between certain types of recreational provision and financial motives:

Mr F, a middle aged farmer with a 60 ha horticultural holding in Kent, had established a large farm shop and garden centre/plant nursery to provide a viable outlet for home grown produce and maximise 'value added'. In order to attract additional people, especially families, to the farm shop and garden centre, a pets' corner, children's farm yard and children's play area had been established. The facilities are free but serve to provide an activity visible from the nearby road to attract people into the farm-house garden for 'cream teas'. Their provision is reflected in an increase in takings. (Mr F, Farm 576).

Another point to note is that although, for example, on-farm catering is placed at the top of the table in terms of the proportion of farms expressing financial motives, this does not take into account the total number of farms with catering. In absolute terms, the number of farms where a particular type of recreation is financially motivated is a function of the total number of farms and the proportion of financially motivated farms. For example, a relatively low proportion of the farms with coarse fishing activities expressed financial motives (59%), yet coarse fishing has a very high incidence and as a result the absolute number of farms where recreation is financially motivated is one of the highest in the sample (61). The extent of financial motivation recorded in relation to individual types of recreation by Bull and Wibberley (1976) is very similar to that reported here: horse riding (55%); fishing (67%) and shooting (59%). However, they recorded a much narrower diversity of types, and interestingly coarse fishing exhibited the highest degree of financial motivation in their study, reflecting the more recent growth of a variety of strongly financially motivated activities, such as farm parks.

An analysis of the financial motivation of specific types of temporary recreational provision is subject to the same observations as that conducted for permanent recreation. Nevertheless, it does provide a relative indication of the association between a financial motive and specific types of temporary recreational provision (Figure 7.4). It should be noted that only 7 of the 112 farms with temporary recreational provision expressing financial motives have just events or visits and no other permanent provision of recreational activities (Figure 7.5). This indicates that the provision of temporary recreation alone is not strongly financially

motivated. Nevertheless, the fact that nearly 50% of the farms expressing financial motives have some form of temporary recreational provision alongside permanent recreation suggests a link between the two. A link which is reinforced by the example of Mr and Mrs J:

Mr and Mrs J are responsible for a 1000 ha mixed arable, horticultural and livestock holding as part of a 4000 ha family farm business split between 5 separate sites in Kent. They operate 14 different recreational activities on their part of the family holding, 12 of which are integrated together in the form of a large 'farm park'. The farm park comprises a small indoor museum of old farm machinery and artefacts, a nature reserve consisting of farm woodland and a pond used for educational visits, an open air picnic site, a large adventure play area, a 2 mile laid out farm trail with interpretation boards and guide, a 40 seat indoor farm cafe, an extensive collection of rare breeds of livestock and other farm livestock and animals, educational facilities for school visits and a series of regular [temporary] events at weekends throughout the summer, including sheep dog trials, historic battle re-enactments and heavy horse demonstrations. An entry charge is made for the farm park but no additional charge is made for the events which act to attract additional people into the farm park at the weekends. In addition, separate to the farm park, the farm also operates a separate day ticket fishing enterprise and hosts a local hunt. (Mr and Mrs J, Farm 632).

Overall, organised group visits emerge as the single type most likely to be associated with farms expressing a financial motive (80%). In contrast, none of the farms with school or college visits expressed a financial motive. Qualitative analysis at the activity level permits a more direct examination of the links between financial motives and the provision of temporary recreation. Only 5 out of the 20 individual temporary activities on the case study farms identified financial motives in relation to their provision. These consisted of two farm open days, two sheep dog trials and one historic battle re-enactment, tending to confirm the pattern established from the aggregate farm level analysis. This does, however, illustrate the commodification of some temporary events, such as sheep dog trials.

Having completed the analysis of financial motivation, it is important to note that this is far from a unidimensional expression. In fact, recreational provision is initiated with the aim of fulfilling a range of financial roles within farm businesses. Financially motivated approaches range from 'disengagement from agriculture', through to 'supplementary business' and 'pin money'. The variation in extent of financial motivation is illustrated by the following three cases:

(a). Disengagement.

Mr T is a young farmer who returned to take over his father's 19.8 ha smallholding in Kent after selling a successful agricultural contracting business which he no-longer had the enthusiasm to run. The existing farm business had been operated, in a variety of guises, since 1957 by Mr T Senior including market gardening, growing strawberries, courgettes, spring greens, potatoes, cabbages, maize, a 10,000 head poultry unit and an intensive pig unit. However, the limited amount of land available (and no opportunity to expand because of the close proximity to a large commuter

village and golf course) and its poor quality (grade 3 agricultural land, clay with flints) which made it difficult to cultivate had resulted in a very poor return on investment and the farm had become run-down. All of these activities could only provide an income of less than £12,000 per annum and for this reason the land was put into a voluntary 5 year set-aside agreement in 1989 and cropped for hay. The rules of the set-aside scheme changed and excluded land used for grazing and for producing a hay crop. Financial assistance from the CAP was no-longer available. Mr T systematically explored options for the future development of the land which would simultaneously ensure the continuity of the holding where he grew up and safeguard his father's retirement, generate a competitive return on his investment, be acceptable to the local community, realistically gain planning permission and provide for the upkeep and maintenance of the existing buildings (including a listed farmhouse). Mr T identified a need for recreational activities to serve the village (which has a very high proportion of families with young children). He initiated a three phase development involving a large indoor children's play barn, a large outdoor adventure playground and a green field recreational facility for activities including picnicking, ball games and cycling. The first phase was already providing a respectable return on his investment. The development effectively meant that the holding had disengaged from agricultural production and recreation was now the sole source of income. (Mr T, Farm 1180).

(b). Supplementary.

Mr B, an older farmer, operates a 135 ha farm business in Leicestershire (100 ha arable cropping and 150 head of sheep) in partnership with an only son. In 1992, they developed 120 coarse fishing pegs, including the improvement of 40 pegs on a stretch of river and the construction of 2 new fishing lakes adjacent to the river in a water-logged unproductive area of ground unsuitable for agriculture. Their aim was to generate supplementary income from an under used resource which did not contribute to the agricultural business. The lakes had proved to be very successful at a time when income from the agricultural components of the business had fallen considerably. The coarse fishing was now making an increasingly important contribution to the farm business. (Mr B, Farm 424).

(c). Pin Money.

Mr H is the manager of a large family farm business (operating as a limited company) comprising 4 distinct farms totalling some 400 ha under a mixture of arable, top fruit and vegetable production. The acquisition of one of the farms in 1960 included 10 ha of lakes (which had been created by gravel extraction) which formed an integral part of the purchase but presented limited productive options. The site was subsequently designated a Site of Special Scientific Interest (SSSI) and as a result many potential recreational uses are not permitted. The site is leased to a local angling club to generate some income from 10 ha of land which would otherwise require some management and generate no return. The lakes generate a small 'pin money' return and involve no day to day running commitment on the part of Mr H or his employees. (Mr H, Farm 503).

(iii). INTEREST MOTIVATED RECREATIONAL PROVISION.

Of the 546 farms with some form of recreational provision (including personal use) identifying reasons for its adoption, 256 (46.9%) identified interest motives. Interest motives thus represent a significant motivation for the provision of recreation. This aggregate figure does, of course, disguise variations in the proportions of farmers expressing interest motives according to the category or categories of recreation which they provide.

The aggregate level of interest motives (47%) is higher than that reported by Bull and Wibberley (1976) in relation to recreation (42%) and significantly higher than reported by Evans (1990) in relation to farm-based accommodation (20%). Nonetheless, this total equates to 'all' motives relating to recreational provision, including personal use. Indeed, disaggregating interest motives according to category of provision (Figure 7.2) reveals that 95% of farms where the only recreational provision is for personal use expressed interest motives, whereas only 38% of farms with permanent recreational provision only, and 45% with temporary provision only, expressed interest motives. Farms where the only recreational provision is open to the public without booking expressed the lowest level of interest motives (23%). It has already been shown that this category of provision is most strongly associated with financial motives and it appears that interest motives play a far less important role in the provision of this type of recreation than financial motives. In contrast, interest motives were far more strongly associated (53%) with recreational provision for clubs and syndicates, the reverse being true in relation to financial motives. A personal interest, and perhaps involvement, seems far more important in respect to these activities. This is illustrated by the case of Mr L:

Mr L, a 62 year old farmer running a 240 ha horticultural holding in Hertfordshire enjoys game shooting. In 1960, he established a small game shooting syndicate on the farm, comprising himself and 10 other people, so that he could pursue his interest more regularly. The syndicate has since grown to a total of 20 members rearing and releasing 500 game birds per annum on the farm (Mr L, Farm 991).

Interest motives are also more strongly associated with temporary recreational provision (45%) than with permanent recreational provision (see Figure 7.2). These levels of interest motives, which exclude recreational provision for personal use, are far more in keeping with those of previous studies of recreation (DART 1974, Bull and Wibberley 1976).

In the same way that the relationship between a financial motive and recreation type has been explored, it is possible to investigate the association between the expression of interest motives and different types of permanent and temporary recreational provision. There are two distinct elements of this analysis. The first element concerns the relationship between specific types of recreation and interest motives. As the majority of farms have more than one type of recreational provision, it is impossible to ascribe interest motives, on a farm scale, directly to an individual activity. Instead, a relative measure is generated that indicates how strongly interest motives are associated with farms with different types of

recreational provision. Additionally, many of these farms also have recreational provision for personal use.

The association between interest motives and permanent recreational provision in Figure 7.3 exhibits an interesting reversal of the trend outlined in relation to financial motives. Many of the activities which are associated with relatively low proportions of farms expressing interest motives (the average for the sample is 41%), such as access agreements (19%), golf courses (30%) and rare breeds parks (36%), are all associated with relatively high levels of financial motivation. In relation to rare breeds, this contrasts strongly with the findings of Evans and Yarwood (1998) from a survey of Rare Breeds Survival Trust (RBST) members where interest reasons dominate the reasons for keeping rare breeds. However, Evans and Yarwood's (1998) survey encompassed all those keeping rare breeds and not just those employing them as part of an attraction.

In contrast, activities such as the provision of village sports pitches, associated with a low level of financial motivation, exhibit a high degree of interest motivation (75%). This pattern again re-inforces a dichotomy between financially motivated recreational provision, associated with certain types of recreation (for example motor sport), and non-financially motivated provision, more strongly associated with different types of recreational provision (for example village sports pitches). Interestingly, equestrian activities, both facilities for riding and horses for riding, exhibit relatively low levels of interest motives. Initially, this is somewhat surprising as it might be expected that equestrian activities would be strongly associated with interest motives. Moreover, the exclusion of farms with recreation for personal use from this analysis may account for links between equestrian activities for personal use and the wider provision of equestrian activities. Indeed, the following cases confirm the presence of such links:

Mr H is a keen golfer who plays regularly. During a round with one of his regular playing partners, the idea of developing a driving range was mooted. Their knowledge of the lack of similar facilities in the locality convinced them to go into partnership to develop a golf driving range. Mr H is the manager of a large family farm business comprising of 4 distinct farms totalling some 400 ha. The partnership agreement involved him contributing some 8 ha of poor quality land, in a fragmented block with good access to nearby roads, to the project. His partner put forward the remainder of the capital investment required to develop the facility. (Mr H, Farm 503).

Mr B junior, a young farmer in his late twenties, operating a 135 ha farm business in Leicestershire (100 ha arable cropping and 150 head of sheep) in partnership with his father, had played an important role in the initiation of a coarse fishing enterprise on the farm. Mr B junior had grown up on the farm and had been introduced to fishing, on a stretch of river on the farm, by one of his father's employees. As a result of this early experience, his main leisure pursuit had become coarse fishing. He regularly visited various other

coarse fisheries, both locally and further afield, in order to pursue his hobby and catch species and sizes of fish which he was unable to at home. However, Mr B junior's increasing commitment to the farm business and his entry into partnership with his father meant that he had less time to pursue his hobby. In addition, the increased financial strain on the farm business because of the partnership meant that consideration was given to expanding or diversifying the farm business. Mr B junior's knowledge of coarse fishing, as a result of his personal interest, the existence of suitable resources and a history of fishing on the farm, were all important factors in the decision to diversify into coarse fishing. It also permitted Mr B junior to continue and expand his interest in fishing (Mr B Junior, Farm 424).

A similar pattern to that evident in relation to permanent recreational provision emerges in relation to temporary recreation (Figure 7.4). Personal interest is more strongly associated with certain types of temporary recreational provision. Notably, riding/equestrian events are associated with a much stronger level of interest motives than permanent equestrian activities, for example:

Mrs W is a keen horsewoman. She rides on a daily basis and is also a member of the local hunt, riding with them at least once a week. She owns several horses and dedicates a large amount of her time to their upkeep. As a result of her contacts and her enjoyment of riding activities she started an annual gymkhana in 1974 on the family holding (a 360 ha arable farm in Hertfordshire). The event has since taken place on one day per year and currently attracts on average 1000 competitors and spectators (Mrs W, Farm 856).

Mr J is interested in heavy horses and has developed a small collection of different breeds and various related implements and equipment over many years. He regularly takes part in associated competitions and shows and is currently the secretary of an association concerned with heavy horses. More recently Mr J and his wife have developed a large 'farm park'. Mr J's personal interest has now been translated into heavy horse demonstrations at weekends as part of the farm park (Mr J, Farm 632).

The second element of the analysis relating to interest motives and recreational provision concerns the relationship between the provision of recreation for personal use and the development of other types of recreation. Although the first element of analysis is necessary to highlight direct links between interest motives and specific types of recreational provision, it obscures an important consideration. By excluding farms with both recreation for personal use and permanent/temporary recreational provision, it is not possible to explore the links between recreational provision for personal use and the development of other recreational provision.

The relatively high incidence of recreational provision for personal use, coupled with the very high level of interest motives expressed in relation to this provision, indicates a sizeable provision of a range of types of recreation as a result of personal interest. This represents an interesting reservoir of expertise which may be drawn upon by farmers in the establishment of other forms of recreational provision. Many recreational activities require a

certain degree of expertise if they are to be successful. An interesting example of this is horse riding where a knowledge of horses and how to look after them is necessary. Although such experience can be hired, it is far simpler (and less costly) if a member of the farm household possesses such knowledge as a result of personal interest and participation in the activity.

It is possible to explore this issue by looking at the proportion of farms with both personal and permanent recreational provision who have the same type of recreation in both categories of provision. A link between the provision of recreation for personal use only and the provision of the same type of recreation which is more widely available is suggested. Analysis of this link is done in Table 7.14 and three groups emerge. The first group is comprised of types of recreation where a link appears to exist between recreational provision for personal use and permanent recreational provision. For example, 40% of the farms with permanent provision of game fishing also had game fishing for their own use. The strength of the association between recreational provision for personal use and permanent recreational provision appears to vary. It also strongly reflects the types of recreation which exist on farms for personal use. The second group relates to those types of permanent recreation which do not appear to be associated with the provision of the same activity for personal use. The third group corresponds to those activities which were not found on any farms (with permanent and personal provision) expressing interest motives. Interestingly, this group corresponds very well to those types of recreation associated with the lowest level of interest motives and those activities which are strongly associated with financial motives (Figure 7.3).

The analysis of associations between the provision of recreation for personal use and permanent recreational provision is limited because it can only identify links between specific types of recreation. For example, the association between the provision of horses for riding for personal use and the wider provision of horses for riding is relatively weak. However, the provision of horses for riding for personal use might lead to the development of other equestrian related activities on the farm, such as equestrian events and facilities for riding (cross country courses, for example). Similarly, a personal provision of one type of shooting might lead to the wider development of a different sort of shooting on the farm.

PERMANENT RECREATION TYPE	FARMS WITH PERMANENT AND PERSONAL PROVISION EXPRESSING INTEREST MOTIVES (N)	% WITH BOTH PERMANENT AND PERSONAL PROVISION
War Games / Paintballing.	2	50
Facilities for Models.	4	50
Game Fishing.	10	40
Facilities for Riding: Gallops, Cross Country Course.	18	33
Clay Pigeon Shooting / Gun Club.	16	31
Rough Shooting.	15	27
Coarse Fishing.	19	26
Game Shooting.	32	19
Horses for Riding / Trekking / Lessons.	7	14
Open Farm: Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	16	0
Educational Facilities.	16	0
Village Sports Pitches.	8	0
Access Agreements.	7	0
Laid out Farm Trails / Nature Trails / Cycle Trails.	5	0
Airfield / Gliding / Parachuting.	3	0
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	3	0
Picnic Site.	3	0
Museum.	1	0
Farm Birthday Parties.	1	0
Others.	0	0
Adventure Play Area / Children's Play Area.	0	0
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	0	0
Nature Reserve / Country Park / Gardens.	0	0
Golf Course / Driving Range / Crazy Golf / Pitching.	0	0
Catering: Farm Restaurant, Teas, Coffee Shop.	0	0

Table 7.14. The relationship between recreational provision for personal use and permanent recreational provision. (Source: Author's survey).

(iv). SOCIAL MOTIVES.

Social motives are expressed by just over a fifth (22%) of the farms with recreational provision. This represents a much lower proportion than expressed with respect to either financial or interest motives, but is higher than the 14% level of social motives reported in relation to farm-based accommodation by Evans (1990). The higher proportion perhaps reflects the importance of many recreational activities as social fixtures in the farming calendar.

The relative importance of social contact with visitors to the farm varies relatively little when sub-divided according to category of recreational provision. A notable variation present is amongst those respondents where the only provision is temporary recreation. In this case, nearly three times as many farms expressed social motives compared to the sample as a whole. This mirrors the findings of DART (1974) who also reported that social motives are strongly related to the provision of temporary recreational activities. A short-term event appears to fulfil social motives more effectively than a long-term commitment (Figure 7.2) and this role is highlighted by the example of Mr M:

Mr M farms in the county of Durham. The farm is a beef and sheep holding with 40 suckler cattle and 200 sheep grazing on 145 ha of in-bye land. Mr M is a keen sheep dog trialist and allows his farm to be used for a local sheep dog trial once a year. The trial consists of about 15-20 competitors and about 500 spectators. The gathering acts as an important social event for the local farming community with many local farm families attending and competing. The event has been associated with the local farming calendar for at least 50 years. The trial itself is not widely publicised beyond the farming community and does not generate any income. (Mr M, Farm 173).

In terms of recreation type, the relative association between social motives and certain types of permanent and temporary recreational provision exhibit quite wide variations. For example, 64% of farms with picnic sites expressed social motives whereas none of the farms with golf facilities did so (Figure 7.3). A relative spectrum emerges which illustrates that certain types of recreational provision are far more strongly associated with the expression of social motives. Many of these types have already been shown to often be found in association with one another and are characteristic of the 'farm park', often a visitor intensive form of recreational provision, as the following two cases demonstrate:

Mr E farms a 240 ha owner-occupied beef and sheep holding in the county of Gwynedd. The recent development of a farm activity park, comprising a go-kart track, off-road quad bikes and various other facilities on the holding was primarily financially orientated. However, social motives were also an important consideration for Mr E who enjoys the contact with visitors to the farm activity park which he would not otherwise experience in his normal farming activities. (Mr E, Farm 87).

Mr and Mrs F own a 60 ha horticultural holding in Kent growing mainly cauliflowers. They had become disillusioned with the responsibility and management of the 'gangs' of workers associated with horticultural production. Mrs F in particular enjoys meeting people and being in control of her own work. They took the decision to operate the farm on a share farming agreement and concentrate on developing their shared interests in the form of a retail plant nursery specialising in temperate maritime plants which offers a more social working atmosphere through dealing with the general public. (Mr and Mrs F, Farm 576).

In both cases, social motives are strongly related to financial motives and in many ways are key determinants of the type of financial recreational provision that has developed. A fact which confirms the importance of non-financial motives alongside financial motives as an

important factor influencing the development of recreation, and indeed specific types of recreation.

Social motives are particularly important in the establishment of permanent activities involving large numbers of visitors to the farm. The opposite is true of many of the more traditional activities which exhibit relatively low levels of social motivation. This seems quite surprising, but in many cases there is little or no social interaction between recreation provider and consumer because the majority of these activities are simply sub-contracting farm resources for the use of a group. The strong association between temporary recreational provision and social motives is explored in more detail in Figure 7.4. Once again, significant variations exist between the different types of temporary recreational provision and the expression of social motives. Unsurprisingly, social events are associated with the highest degree of social motivation.

Social motives in relation to recreational provision appear to encompass two different types of interaction: first, that of contact with the general public coming to visit the farm; and second, social interaction with other farmers. The first of these has been observed widely in other diversification research (see Evans 1990). The second, interaction between farmers, has rarely been observed before which is not perhaps surprising as recreation would appear to be quite unique in this sense. The social importance of auction marts for farmers is well known. Nevertheless, these are declining and so the social importance of recreation may well rise. The development of collaborative marketing groups, such as the Farm Holiday Bureau and the FAGs, may represent a new form of social interaction between farmers, especially for the financially motivated operators where the activities themselves tend not to involve interaction with other farmers.

(v). ALTRUISTIC MOTIVES.

Altruistic motives are expressed by 7% of the respondents with recreational provision, the lowest incidence in relation to motives. Altruistic motives encompass a range of activities for the benefit of others including conservation, education, public relations, local community and charity. Despite the relatively low incidence of altruistic motives, many farmers held strong opinions about the importance of these activities. For example, the following comments were forthcoming from the postal questionnaire survey:

*"need to educate public on agricultural issues" (Farm 695);
 "farm tours for schools- to encourage jo[e] public to understand farming and
 that we are not destroying the countryside" (Farm 726);
 "to help local primary school" (Farm 19);*

"[to] educate people about organic farming" (Farm 536);
 "good PR [Public Relations]" (Farm 324);
 "to encourage young people" (Farm 580);
 "support YFC [Young Farmer's Club]" (Farm 897).
 "enables more people to enjoy the countryside" (Farm 821);
 "request by others for charity " (Farm 577)
 "let to [a] small local club" (Farm 326);
 "always maintained that the local community is free to enjoy the farm" (Farm 37);
 "help [the] local community" (Farm 69);
 "pleased that a local group could enjoy the fishing" (Farm 627);
 "longstanding access agreement for local residents" (Farm 387).

The relatively low numbers of farms expressing altruistic motives mean that associations between altruistic motives and different categories of recreational provision are fairly weak (Figure 7.2). Nevertheless, the higher proportion of farms with both permanent and temporary provision indicates that altruistic motives tend to be associated with farms with multiple types of recreational provision.

Unsurprisingly, educational facilities, laid out farm trails and adventure play areas feature as the recreation types most strongly associated with altruistic motives (Figure 7.3). Access agreements, farm birthday parties and picnic sites are also prominent. Once again, these types are strongly associated with one another and, therefore, farms with more than one type of recreational provision. Both the following cases highlight the strong relationship between altruistic motives and this type of activity.

Mr G, a middle aged farmer operating an 80 ha owner-occupied arable and sheep holding in Gloucestershire, began school visits in 1976 for altruistic reasons. He caters for 1 school visit each year entailing a farm walk, woodland walk, talk and questions and involving 240 children from a local school spread over 2 days.

'I have always felt that children and not least adults have to make decisions and form opinions about many things including food and farming. They should benefit from learning as much as possible of the true facts.' (Mr G, Farm 796).

Mr I farms a 275 ha holding in Gloucestershire. Dairying is the main productive focus of the farm with a 200 head dairy herd. The farm also produces 100 head of beef cattle annually and has 100 ha of arable cropping which provides grain feed for the beef and dairy stock. Open days were started on the farm over 30 years ago in 1966. Mr I was keen to educate people about agricultural issues. At this time, he was also secretary of the CLA which also valued educating people about farming and approached the Countryside Commission (CC) for their backing. Two open days were established in the first summer. These received CLA and CC backing and promotion and attracted over 8000 visitors in total. As a result, a farm trail which is open all the time was developed (in conjunction with the CC and CLA which helped fund its development). This includes a milking parlour observation platform, interpretation boards and a booklet which describes the trail, an extract from which follows: 'this farm trail has been designed to give an explanation of dairy farming on a modern dairy unit in an area where the landscape is designated as of Outstanding Natural Beauty. The trail is made up of two circuits, the shorter in and around the farm buildings, illustrates the modern techniques available and used on this farm. The second, and longer circuit, some two miles in length is a field trail which takes in all the various

land forms and crops to be seen from the farm. Although it is possible that the farmer will not be about, it is hoped that an impression of his attitudes to farming will be conveyed by the trail'. (Mr I, Farm 695).

In terms of temporary recreation types (Figure 7.4), a similar pattern emerges. School visits are the type most strongly associated with altruistic motives.

Mr Y manages Farm 238 for a large company. He has a background in engineering but trained alongside the previous farm manager and has learnt the trade as he has gone along. The farm consists of 150 ha of arable cropping which is share farmed in conjunction with the Co-operative Wholesale Society (CWS) and a 650 head pig herd which is a dam line nucleus herd producing high genetic quality breeding stock for a large UK livestock company. In 1981, one of the active partners in the company (who is also a parent governor at a local school) approached Mr Y to hold an open day to 'project farming in the right light'. As a result the farm now hosts 1 open day per year, primarily for local school children involving educational tours, tractor rides, talks and questions. (Mr Y, Farm 238).

Besides mainly educational recreation types being strongly associated with altruistic motives, the latter are unimportant for most other types.

(vi). OTHER MOTIVES.

Respondents identifying other motives for recreational provision, outside the four fold division of financial, social, interest and altruistic, have rarely been examined in the existing recreation-specific research (DART 1974, Bull and Wibberley 1976). A total of 16% of the responding farms identified other motive(s) for their recreational provision.

Many of those expressing other motives for recreational provision highlighted the fact that recreational activities on their farms are imposed by their landlord as part of their tenancy agreement. For example;

*"shooting [is] let by [my] landlord" (Farm 198);
 "[recreation is] under control of [my] landlord" (Farm 731);
 "[the]estate [is] owned by [a] large company and [is] used for corporate entertaining" (Farm 832).
 "fishing and shooting let by estate" (Farm 106);
 "part of large estate landlord controls shooting" (Farm 1509).*

The relationship between farm tenure and recreational provision is explored in more detail in Chapter 9, although it should be noted that the way in which recreational provision on a farm may be an integral part of the tenancy agreement and out of the operator's hands has rarely been emphasized before (Ilbery 1988). Tangential benefits were mentioned by several farms, for example the benefit of shooting for 'pest control'. Security was also identified as another spin-off of recreational activities on the farm;

"security, [the] activity is a deterrent" (Farm 306).

A long tradition of recreational provision also helped to explain the expression of other motives in several cases, again representing a form of obligation as a result of past activities.

*"[game shooting] has always taken place here" (Farms 734 and 835);
 "[the] previous owner [is] master of [the local] foxhounds" (Farm 1045).*

A small number of farmers who identified other motives commented that they had been approached to provide recreation:

*"requests from groups" (Farm 110);
 "they asked, we obliged" (Farm 84).*

Two distinct categories of provision are significantly more strongly associated with other motives than the sample average. These are recreational provision for clubs and syndicates and temporary recreational provision (Figure 7.2). In terms of permanent recreation type (Figure 7.3) and other motives, it is traditional activities which feature highly, and indeed it is these types which tend to be most strongly associated with provision for clubs and syndicates. Types featuring prominently include game shooting, rough shooting, coarse fishing, access agreements and nature reserves. The case of Mr H highlights the nature of one such activity:

Mr H operates a 75 ha dairy farm in Cheshire. A small syndicate of about 20 members has fished on a 5 ha irrigation reservoir on the farm since 1977. The group approached Mr H and pay a nominal annual rent, but there is no formal agreement between the two parties. Mr H has no involvement in the syndicate which manages and organises the fishing itself. (Mr H, Farm 568).

The strong association between the expression of other motives and temporary recreation type is explored in more detail in Figure 7.4. Riding events in particular emerge as the single type of temporary recreational provision most likely to be associated with other motives. It appears that traditional riding activities, such as hunting, which simply have access to the farm, are associated with the expression of other motives, for example:

Mr S runs a 70 ha arable farm in the county of Durham. Mr S allows his land to be used by the local fox hunt. Usually there is only one hunt in the area each year and as a result of the nature of hunting the hunt may or may not pass over the farm. Mr S has no formal contact with the hunt, although he knows several members on a social basis. Hunting has taken place on the farm as long as he can remember and as a result Mr S. would not consider withdrawing his permission for the hunt to use his land as this might affect the way he is viewed by his peers (Mr S, Farm 106).

In general, it seems it is those activities imposed upon farmers, either by tradition or by approaches to use the farm in ways 'passive to the farmer', where recreation has been initiated by a third party such as a small club, imposed by a landlord or as a product of tradition that represent other motives. Activities promoting security or generating tangential benefits are also important representations of other motives for recreational provision.

Perhaps more than anything, the analysis of 'other' motives highlights shortcomings with the DART (1974) 4 fold classification. Specifically three problems emerge. First, are potential difficulties with the way in which postal questionnaire respondents have interpreted a specific motive, particularly when distinguishing between social and altruistic motives where there is scope for considerable overlap. Indeed, analysis at the activity level has confirmed that the expression of motives is far from mutually exclusive and many activities have a complex underlying mix of motives. Secondly, motives are subject to change over time and consequently may result in changes to the activity. Thirdly, other motives exist outside the 4 fold classification, notably security and obligation. This highlights the problem of applying predetermined conceptual categories to research and reinforces the value of a flexible sensitive approach. Nonetheless, the classification of motives in this way is a useful tool which provides a valuable indication of the role of different motives in the provision of recreation.

(vii). THE GEOGRAPHY OF RECREATION MOTIVES.

This sub-section of the analysis presents the geography of recreation motives. Rather than presenting this within the respective preceding sub-sections, it is more useful to examine geographical differences in the expression of motives in each area. Motives, expressed on the same basis explained in 7.2(i)(b), give a relative indication of the strength of each motive amongst farms with recreation in each of the study area counties. Yet, it must be noted that the varying incidence of recreation between the study areas (see Chapter 5) means that this measure does not provide an absolute indication of the proportion of responding farms with each motive in each area.

Financial motives are most strongly associated with farms with recreation in Kent (Figure 7.6), although there is relatively little difference between the financially motivated proportions recorded for most of the counties in the sample. The counties of Kent, Hertfordshire, Durham and Cheshire exhibit a level of financial motives fractionally above the average for the sample. There is no obvious explanation for the slightly higher proportion of farm

businesses in these counties with financial motives. Conventional explanations are based on the link between different farming systems and the income pressure experienced with particular enterprises. This will be explored in more detail in Chapter 9.

The counties of Gwynedd, Gloucestershire and Humberside exhibit lower than average proportions expressing financial motives. Most notably, the county of Humberside exhibits the lowest proportion of farmers with recreational provision expressing an income motive (29%). A proportion which is significantly lower than that of all the other counties. The dominance of profitable arable production in this county may well help to explain the low proportion of farms expressing income motives, although in this respect the large difference between Hertfordshire and Humberside is of particular note, especially as they are in the same 'agricultural' cluster (Chapter 4). It would appear that factors such as farm size, part-time farming and the demand for recreation, as well as the dominant type of production, are all important. This observation highlights the need for more detailed analysis of the relationship between recreation and farm characteristics (Chapter 9).

Interestingly, financial motives are expressed by 52% of the farms in Kent with recreational provision who identified motives. This proportion corresponds very well to that reported by Bull and Wibberley (1976) for recreation in South East England. They found that 47.9% of farmers with recreation were financially motivated. It appears, on the basis of this evidence, that financial motives for recreational provision are only marginally more prevalent now than over 20 years ago. Indeed, given the likely over-representation of income motives in the sample, the relative financial motivation may actually be lower now. This result seems very surprising, especially given the large body of literature which would suggest that raising income from other sources is now significantly more widespread (for example, Arkleton Trust 1992, Bateman and Ray 1994, Ilbery *et al* 1998). There are two possible explanations for this discrepancy. First, financially motivated recreational provision in Kent may already have been well developed in the 1970s and may not reflect the more recent development of recreation elsewhere. Secondly, it is possible that the number of farms raising additional income from recreation has increased only slightly, but that the amount of income that they raise from this source has increased significantly.

The proportion of farms expressing interest motives in relation to their recreational provision varies from 18%-63% between the study counties (Figure 7.6). A very high level of personal interest was expressed by farmers in Gloucestershire (it is worth noting that this county is also associated with strong levels of personal interest in relation to the keeping of locally

indigenous livestock breeds, see Evans and Yarwood 1998). In contrast, Gwynedd and Humberside both exhibit a relatively low level of personal interest in relation to recreational provision. This result is quite surprising as it might be expected that personal interest would be fairly similar throughout. It appears that these differences can be attributed to the association between different types of recreation and interest motives and the link between different types of recreation and the study areas (Chapter 5).

Examination of the respondents identifying social motives by study area (Figure 7.6) reveals that a higher proportion of respondents in Gwynedd, over twice the average, expressed social motives for the provision of recreation. It is likely that this reflects the isolated nature of farming in this area, emphasising the importance of both traditional farming activities such as sheep dog trials as social gatherings and meeting visiting tourists on some farms (although in this case social motives tend to be combined with financial motives). A similar observation can be made in relation to the relatively high level of social motives expressed by farms with recreational provision in Durham. The lowest proportion of respondents identifying social motives is in Hertfordshire. The county's high population density may be an explanatory factor. There may also be an off-farm effect operating here, with respondents in Hertfordshire having greater social contact off-farm.

Altruistic motives are relatively more prevalent in relation to recreational provision in Gwynedd and Leicestershire, whereas farmers in Hertfordshire and Humberside, in particular, exhibit a lower prevalence of altruistic motives. The diversity of different specific motives encompassed by altruism means that it is difficult to generate a distinct explanation for these differences. Most altruistic motives appeared to be expressed in relation to local people, although it is possible that the relatively high level of altruistic motives with respect to recreational provision in Gwynedd may reflect a more general motive for the benefit of people holidaying in the county. Equally though, it appears that there may be a divide between intensive arable production systems and extensive livestock systems.

The variation in the proportion of farms expressing other motives between the study areas is not very pronounced. Nonetheless, a slightly higher proportion of farms with recreational provision in the county of Humberside expressed other motives. This perhaps reflects the high level of game shooting already observed in this county and the association of this type of recreation with provision for clubs and syndicates. Farmers in Kent, in particular, appear fractionally less likely not to express motives in relation to recreational provision.

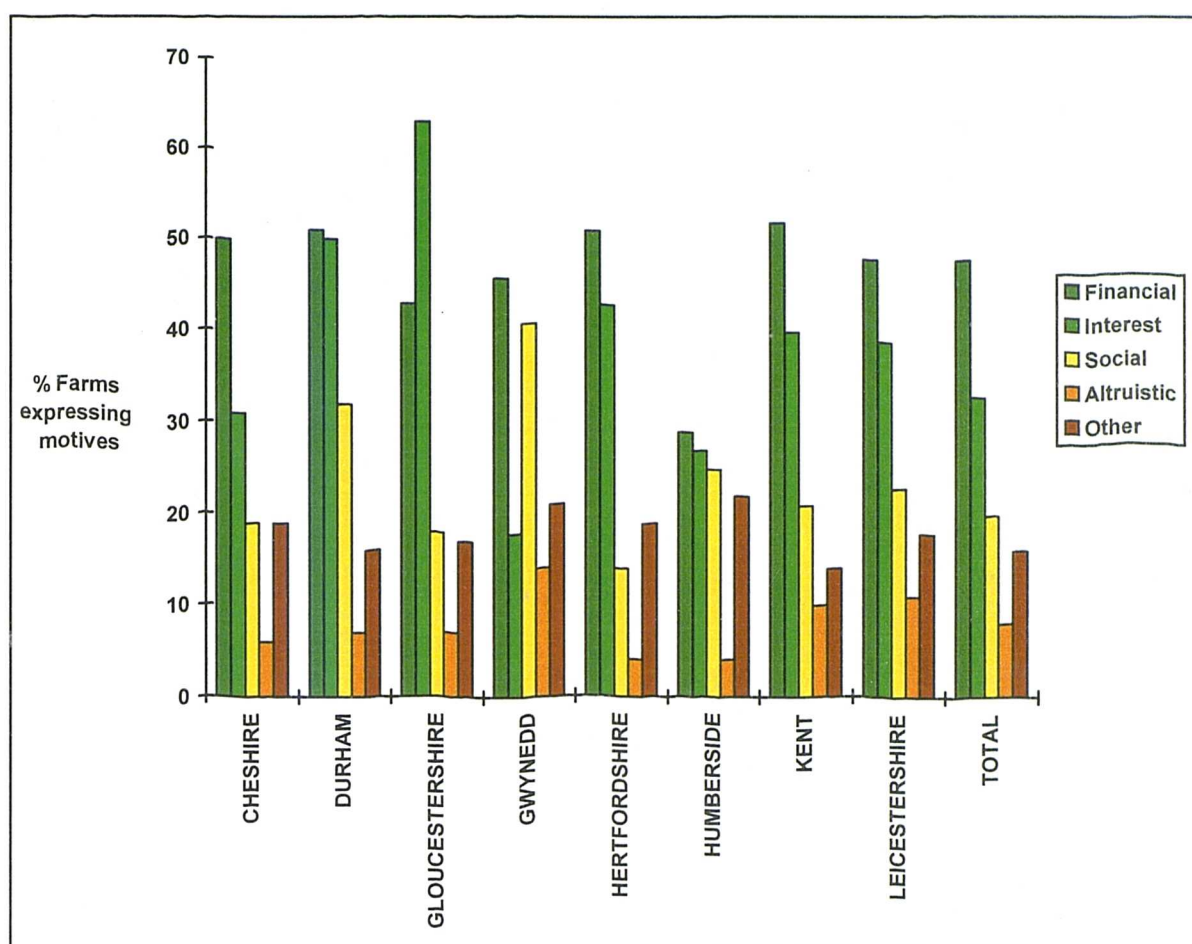


Figure 7.6. Motives for permanent and temporary recreational provision (Source: Author's survey).

7.3. The Process of Recreation Initiation.

Five distinct elements corresponding to the process of recreation initiation can be identified. This section of the analysis explores each of these in turn.

(i). INITIAL DECISION-MAKERS.

The identification of the role of individuals in the decision-making process is notoriously difficult as the process within farm businesses, especially family farm businesses, is often extremely complex. Research into the decision-making process itself has illustrated the complex way in which farm business decisions are often reached (Blanc and MacKinnon 1990). Any retrospective analysis of the role of individuals in a decision-making process is, therefore, subject to severe limitations. Nevertheless, from the case studies it is possible to identify an 'initial decision-maker(s)' within the process and as such this is a useful starting point to try to gain some insights into the process itself. It must be remembered that the analysis here is concerned with the original decision to initiate recreational provision, and not

subsequent decisions to withdraw or evolve the recreational provision which may in themselves represent more significant decisions (they are explored in Chapter 8). The analysis of the vintage of recreational provision has already highlighted how long-lived many recreational activities are and as a result it is not always possible to identify an initial decision-maker.

The initial decision for the majority (49%) of recreational activities had been taken by a male (Table 7.15). Joint decision-making was the next most prevalent mode, responsible for a further 24% of the activities. Females responsible for the decision to initiate recreation are in the minority (16%) of recreational activities, whilst the remainder are accounted for by either being unknown or out of the business control.

Initial Decision-maker	Activities (N)			
	Pre 1980	1980-1989	1990-1997	Total
Male	15	6	20	41
Female	2	4	8	14
Joint/Company	0	5	15	20
Unknown	5	0	0	5
Out of business control	4	0	0	4
Total	26	15	43	84

Table 7.15. Initial recreation decision-maker (excluding activities for personal use). (Source: Author's survey).

Three observations in relation to this pattern can be made. First, the proportion of recreational activities initiated by male decision-makers exhibits a downward trend over the period. Secondly, the proportion of recreational activities initiated as a result of female or joint decisions has increased markedly. This appears to reflect an increasing plurality of decision-making and a continued erosion of patriarchal authority in relation to recreation. Such processes have been observed before in relation to other forms of on-farm diversification (see Whatmore *et al* 1987b and Evans 1990). It may reflect a commodification of 'farming culture' recreational activities instigated by female household members in the face of increasingly limited farm agricultural options. Thirdly, those activities where the initial decision-makers are unknown or out of the business control are strongly associated with recreation which was established prior to 1980. Strong associations between recreation type and recreation initiated prior to 1980 have already been observed (7.1). Some aspects of the decision-making process are illustrated by the following case:

1. Case Characteristics.

Mr T is a single young farmer, with no children, who returned to take over his father's 19.8 ha small holding in Kent after selling a successful agricultural contracting business. The holding was originally leased from Kent County Council (KCC) as a small holding in 1957 by Mr T Senior and operated as such, in a variety of guises, until 1997. However, the holding is too small to be economically viable. Mr T and his brother and sister approached KCC to purchase the holding in 1995, unknown to Mr T Senior, to ensure the security of the farm where the family had grown up. In 1997, Mr T began to develop proposals for a large indoor children's play barn, a large outdoor adventure playground and a green field recreational facility for activities including picnicking, ball games and cycling. This choice of activity is entirely financially motivated to maximise the business opportunity presented by the farm business.

Mr T's brother and sister could not see the concept of this business, but accepted the need for an economic use for the holding. Mr T Senior was far less amenable to the proposals. Despite this, the development went ahead. It was the culmination of a series of developments on the farm by Mr T which had brought him into conflict with his father, they both live in adjacent houses on the farm (and within 50 metres of the play barn). Mr T Senior had lived on the farm since 1957 and had developed a good relationship with many people in the large adjacent village, he also operates a roadside 'farm shop' selling local fruit and vegetables, some of which is produced on the farm.

The farm had been widely used for exercising local dogs, although there are no formal rights of way. Mr T had decided to rationalise this and instigated access charges (£25 for 6 months), this had generated about £1000 per annum. However, this new arrangement had caused a degree of conflict with many local people, especially those well known to the older farmer. Mr T Senior is also unconvinced by the play barn development which, at the planning application stage, was also a source of conflict with local residents. However, the new business operations are generating an income sufficient to support both Mr T and his father and enable Mr T Senior to continue operating his farm shop which is largely a vehicle of social contact for him, rather than a viable business (Mr T, Farm 1180).

2. Interpretation.

This case highlights the way in which different household members (in this case of different generations) may hold different views of the development of different recreational activities on the farm business. It reflects the different life and enterprise goals of Mr T and Mr T Senior and illustrates the way in which farm business decision-making may result in conflict within farm business, rather than consensus. It also reinforces the complexity of the decision-making process and the way in which individual goals are mediated through complex 'trade offs', often in relation to economic security, between individuals and their activities.

(ii). PLANNING AND PROBLEMS INITIATING RECREATIONAL PROVISION.

Analysis in this sub-section relates to the initial planning of recreation and not to subsequent evolutions (see Chapter 8). The process of planning recreation initiation, and problems

experienced, varied considerably between the case study farms. Informal advice and/or information is the dominant mode of advice sought by the case study farms, being identified in relation to 61% of the recreational activities (Table 7.16). This rises to 69% of the financially motivated activities and falls to 50% of the non-financially motivated activities. Informal advice and information gathering consisted primarily of visits to other attractions as an information gathering exercise. For example, Mr W (Farm 87) had visited other tourist operations to look at and see '*volume operations, observe ideas, ticketing and payment systems*'.

SOURCE OF INFORMATION/ADVICE		PERCENTAGE OF ACTIVITIES		
		FINANCIALLY MOTIVATED	NON- FINANCIALLY MOTIVATED	TOTAL
No advice or information sought		27	50	37
Informal advice/information sought		69	50	61
Formal advice or information sought		54	11	36
	i). Planning Specialist.	35	0	20
	ii). Recreation Specialist.	13	8	11
	iii). Feasibility Study.	4	0	2
	iv). Other Specialist.	10	3	7
TOTAL (N)		48	36	84

Table 7.16. Sources of information and advice for recreational provision. Note: Many farms sought both informal and formal information. (Source: Author's survey).

No advice or information ranks second, accounting for 37% of recreational activities on the case study farms. It is particularly associated with non-financially motivated provision. This relatively high level of farms which had not undertaken any formal or informal search for information brings into question the transferability of the search-based model of decision-making for farm diversification, advocated by Bowler *et al* (1996), in relation to recreation and re-inforces the limitations of applying economically orientated frameworks to recreation. The postmodern informed conceptual perspective adopted here permits the identification of such weaknesses.

Formal advice is fractionally lower still, identified by 36% of the recreational activities. Unlike informal advice, formal advice is far more strongly associated with financially motivated provision. This is reflected in the types of recreation for which this was sought. Planning permission is the dominant element encouraging the acquisition of formal advice (20%). Planning permission was often seen as the 'crucial' element in successful recreational provision and is exclusively associated with financially motivated recreational provision. As

Mr W (Farm 87) observed '*[I am] out of [my] depth on how [the] system works*'. This is reflected in the problems experienced by many of the operators in obtaining planning permission. This is highlighted by the following three cases:

- I. Mr T (Farm 1180) had had his first planning application rejected because the development was thought to be too small, the reasoning being that it would not be viable as an alternative source of income;
- II. Mrs J (Farm 632) had experienced planning problems when trying to convert listed buildings as part of the development of a farm park. It took 3 years and 4 applications before an acceptable compromise could be reached;
- III. Mr B (Farm 424) had operated a clay pigeon shoot under a 28 day licence and applied for full planning permission so that he could increase the number of days on which he was open. His initial application was rejected but after an appeal and public inquiry Mr B succeeded in gaining planning permission, albeit with a strict set of conditions.

Recreation specific advice was sought in relation to only 11% of recreational activities. This tended to be for specialist activities, and once again predominantly financially motivated ones, as in the following three examples:

- I. Mr W consulted a go-karting consultant for an appraisal (Farm 87);
- II. Mr B sought advice from the National Rivers Authority (now Environment Agency) who helped advise him on the size, depth, spoil movements and stocking of his proposed coarse fishing lake (Farm 424);
- III. Mr H explored the possibility of an 18 hole golf-course and employed a consultant to undertake a feasibility study (Farm 503).

Accountants are the main other specialist consulted, primarily to advise on changes to the business structure to minimise tax payments as a result of the introduction of a recreational enterprise.

(iii). CAPITAL INVESTMENT IN RECREATION.

The capital investment required to establish different types of recreational activities and the potential returns from these activities form a prominent focus for much of the existing research into farm-based recreation/tourism (for examples, see Frater 1982, Davies 1983, McInerney and Turner 1991). This can be attributed to the adoption of a modified political economy perspective in much agricultural geography research and to some non-

geographical studies undertaken by agricultural economists (see Chapter 2). Although the economic contribution of recreational activities is undoubtedly important to some farm businesses, an over-emphasis on economic returns from recreation means that the capital investment involved in the provision of non-financially motivated recreational provision has rarely been ascertained. This said, political economy approaches have not been applied to the specific study of recreational activities.

This sub-section of the analysis considers farm capital investment in recreational provision. The analysis is based on the case study farms. The postal questionnaire survey did not seek to identify specific information relating to capital because of the practical problems of obtaining accurate and comparable measures of this highly complex and often sensitive information. Figures relating to actual capital invested, at the farm and enterprise level, are presented here and are rounded to the nearest £100 for simplicity. For the purposes of this analysis, the amount of capital invested in recreational provision by a farm business is defined as the investment on fixed assets for the provision of recreation. This includes structural alterations, construction work, equipment and livestock where applicable. It does not include the capital valuation of *existing* farm assets such as land/buildings which are subsequently used for recreational provision or variable 'running' costs such as promotional activities.

There are two observations which must be made in relation to this sub-section of the analysis. First, the capital investment discussed here relates to permanent and temporary recreational provision and excludes recreational provision for personal use, although it should be noted that it is not always possible to isolate capital investment in recreation for personal use from investment in recreation for wider consumption. Secondly, where livestock form an integral part of the attraction, for example as displays of rare breeds, they clearly have a productive or breeding value in addition to their capital value.

The ethnographic case studies revealed that 4 (20%) of the case study farms had invested under £500 in their recreational provision, yet the same proportion had invested over £50,000 (Table 7.17). This readily illustrates the wide range of levels of capital investment in recreational provision. Indeed, the total amount of capital invested varies from nothing to £201,500 with a mean of £32,600 per farm, although the majority are less than £10,000.

CAPITAL INVESTMENT (£)	FARMS (N)	ACTIVITIES (N)	MEAN (£)	FINANCIALLY MOTIVATED ACTIVITIES (N)	NON-FINANCIALLY MOTIVATED ACTIVITIES ¹ (N)
0	1	21	0	11	16
1-500	3	16	300	6	10
501-10,000	8	28	2,600	19	9
10,001-50,000	4	10	23,700	9	1
50,001 AND OVER	4	3	120,300	3	0
TOTAL	20	84	32,600	48	36

Table 7.17. Farm capital investment in recreational provision (excluding recreation for personal use). ¹ Includes 'other' motives. (Source: Author's survey).

Examining capital investment according to individual activities is even more revealing. Over 25% of the 84 different recreational activities identified on the 20 case study farms are not connected with specific capital investment and a further 60% with levels of capital investment less than £10,000. The variations in levels of capital investment observed on the case study farms reflect three interrelated factors:

- I. the category-type of recreation provided; certain types of recreation are necessarily associated with high levels of capital investment;
- II. variations in capital investment reflect the relative degree of financial motivation present in relation to the provision of an activity;
- III. they reflect the scale of the activity.

Recreational activities not associated with capital investment are dominated by the provision of temporary recreation (15), particularly school visits, but also sheep dog trials, ploughing matches and hunting. Permanent recreational activities without capital investment include the use of existing resources on farms, such as game fishing on a stretch of river (Farm 106), coarse fishing in an old gravel pit (Farm 503) and Countryside Stewardship access agreements on three farms. A similar pattern emerges in relation to activities associated with very low levels of capital investment (up to £500). On the case study farms, these tended to be altruistically motivated activities such as farm trails, picnic sites, nature reserves and some small activities for local groups. Investments up to £10,000 are strongly connected with permanent recreation. Game shooting activities feature strongly at the lower end reflecting a combination of the low level of investment in pens and feeders required for this activity where they are operated by the farm, and no investment by the farm business where they are operated by a third party.

Investments of between £10,001 and £50,000 in individual recreational activities encompass a wide range of different types of recreation on the case study farms. These include an outlay of £25,200 on Farm 1180 to convert a redundant farm barn into a 'play zone', incorporating 3 levels of soft play area, a bouncy tractor, 4000 ball pool, toddlers area and sand pit, through to a capital investment of £49,800 by Farm 424 on a range of automated traps for shooting different types of competitive clay disciplines and a club house for shooting members. Farms 87, 424 and 539 had each invested between £10,500 and £20,100 in the construction and stocking of coarse fishing lakes, whilst Farm 632 had invested £15,000 in classroom facilities to cope with 6 classes simultaneously. Farm 87 had also invested £40,000 in 18 quad bikes to provide quad bike trekking around the farm boundary. The majority of activities with capital investments of this order are open to the public without booking. Three farms had invested in excess of £100,000 in the provision of individual recreational activities. One farm provided motor sport (in the form of a 600 metre club standard go-karting track and 15 go-karts crash barriers, overalls, safety equipment and lighting for evening use (Farm 87). Farm 503 had developed a large golf driving range whereas Farm 632 had invested in an extensive collection of rare breeds and their associated housing (Farm 632).

Extremely high levels of capital investment in recreational provision such as these are strongly associated with large recreation complexes providing a range of recreational activities. It is notable that these three cases are all located in 'tourist' areas (in this case Kent and Gwynedd, which are both identified in Chapter 4 as 'high tourist demand' counties), which appears to reflect the fact that high capital investment in recreational provision is only viable where there is a very large demand.

(iv). SOURCES OF CAPITAL.

Farm businesses employ a wide range of capital sources to fund the establishment of their recreational activities (existing assets such as redundant buildings are not included). These range from non-recreation specific farm business overdrafts to European structural funds. The source(s) of capital investment for each of the 58 recreational activities (i.e. those involving a capital input) are outlined in Table 7.18. Of these activities, 53 had employed either a farm business surplus or a non-recreation specific farm business overdraft to fund their development. Seven activities are associated with the use of recreation-specific overdrafts and a further 4 activities had received funding from the FDGS when this was in operation. European structural funds provided a source of capital for two recreational

activities, the sale of farm land and buildings had also funded two and 'other' sources a further two. It is interesting to note that not only is the farm business/farm business overdraft the dominant source of capital for relatively low levels of capital investment in recreational activities (up to £10,000), but that in the majority of cases it is the sole source. Larger investments appear to rely increasingly on a wider range of external capital sources. There is little evidence to suggest that sources of capital vary significantly between areas, with the one notable exception of the European structural funds which are only available in specific geographical areas. In this case, the two farm businesses which had received European structural funds (1994-1999) under the Objective 5b programme (regeneration of lagging rural regions) and Objective 2 programme (regeneration of regions in industrial decline) are located in Gwynedd and Kent (Isle of Thanet) respectively. Other sources of funding included the sale of a successful agricultural contracting business (Farm 1180) and the use of a partnership agreement with a non-farming business associate (Farm 503).

SOURCE OF CAPITAL	CAPITAL INVESTMENT IN RECREATIONAL ACTIVITIES (£)				TOTAL ACTIVITIES ¹ (N)
	1-500	500-10,000	10,000-50,000	Over 50,000	
FARM BUSINESS/FARM BUSINESS OVERDRAFT (NON-RECREATION SPECIFIC)	16	26	10	3	53
BANK LOANS/OVERDRAFT (RECREATION SPECIFIC)	0	0	7	0	7
SALE OF ASSETS	0	0	1	1	2
FARM DIVERSIFICATION GRANT SCHEME (FDGS)	0	2	2	0	4
EUROPEAN STRUCTURAL FUNDS	0	0	1	1	2
OTHER FUNDING	0	4	0	0	4
TOTAL	16	29	10	3	58

Table 7.18. Source of capital investment in recreational activities. ¹ Note some activities have more than one source of capital. (Source: Author's survey).

The overwhelming majority of recreational developments had relied relatively little on recreation specific external sources of capital. This could be interpreted as contradicting the subsumption analysis of Whatmore *et al* (1987a, 1987b) which suggested that farm businesses are increasingly reliant on external sources of capital. Those businesses providing recreation are typically those with available funds, including farm business overdrafts. Many forms of recreation are not capital intensive and require land and redundant buildings, unlike changes in farm operations (such as land/machinery purchase) and other diversification activities (such as plant/machinery for processing).

(v). LAND COMMITMENT TO RECREATION.

At the farm level, land commitment to recreation varies considerably. Land commitment is divided between an exclusive commitment, which means that the land cannot be used for any other purpose, and a non-exclusive commitment which reflects the fact that in many cases recreation is often compatible with other land uses. Four of the case study farms had none or a very negligible land area exclusively committed to recreational provision (Table 7.19). Only 2 of the 20 case study farms had an exclusive land commitment to recreation in excess of 20 hectares. The majority (12) had exclusive land commitments of between 1 and 19.9 hectares, which compares with the average of 6.9 hectares reported by McInerney and Turner (1991) in relation to recreation excluding equestrian activities, although they didn't consider non-exclusive recreational land use. The reverse is true in relation to non-exclusive land commitments as 15 of the 20 case study farms had non-exclusive land commitments to recreational activities in excess of 50 hectares. This highlights the fact that the provision of many recreational activities does not require the exclusive use of large areas of land, but instead is often compatible with agricultural production. This relationship is particularly true of more traditional activities. The multiple use of land represents a form of land intensification which has not previously been identified.

HECTARES	FARM		ACTIVITY	
	EXCLUSIVE	NON-EXCLUSIVE	EXCLUSIVE	NON-EXCLUSIVE
NONE	4	3	33	51
0.1-0.19	2	0	22	0
0.2-0.9	0	0	6	1
1.0-4.9	6	0	16	4
5.0-19.9	6	0	7	8
20-49.9	2	2	0	2
50 AND OVER	0	15	0	18
TOTAL (N)	20	20	84	84

Table 7.19. Total land commitment to recreational provision. (Source: Author's survey).

At the activity level, this pattern is re-inforced (see Table 7.19). The majority, 39% (33 of the 84 individual activities) had no exclusive land commitment. Very low levels of exclusive land commitment are typically associated with many indoor facilities, for example, educational, catering, farm birthday parties and some types of outdoor provision, for example, nature reserves and picnic sites. A greater land requirement is exhibited by activities such as coarse fishing and motor sport. The largest exclusive land commitment to an individual recreational activity, on the case study farms, occurs on Farm 424 where nearly 10 hectares

of land had been converted into a series of coarse fishing lakes.

Although the majority of the recreational activities on the case study farms (61%) are not connected with any non-exclusive land use, the remainder comprise quite an important component of recreational provision. These are recreational activities which are quite land-intensive, requiring larger areas of land on a non-exclusive basis. They include temporary activities such as sheep dog trials, equestrian events, and farm open days through to permanent activities such as rough and game shooting. For example, game shooting on the case study farms is strongly associated with non-exclusive land requirements in excess of 50 hectares.

7.4. Summary.

This chapter has examined the process of initiation of recreational provision. The analysis has integrated general associations at the farm level generated from the results of the postal questionnaire survey, and detailed quantitative and qualitative analysis at the farm and individual activity level from the ethnographic case studies.

1. Recreational provision takes a wide range of different forms. Five individual cases highlight a variety of farm level commitments to recreational provision in terms of both numbers of different activities and types of activities. They also highlight the juxtaposition of very different types of recreational provision on the same holding and the same type of recreational provision occurring at different scales on different holdings.
 2. The majority of farms with recreational provision had initiated some or all of their activities prior to 1980 with only a fifth of farms providing recreation engaging for the first time since 1990. Analysis at the activity level reveals that over 50% of individual recreational activities had been initiated since 1990, highlighting the fact that many farms with existing recreational provision continue to initiate new provision. The vintage of recreational provision varies considerably according to recreation category and type, for example 57% of farms with only recreational provision for clubs and syndicates had been initiated before 1980 whereas 43% of farms with only recreation open to the public without booking had initiated them since 1990. The vintage of recreation also varies considerably geographically. Farms in Gwynedd are most likely to have initiated recreational provision since 1990, whereas farms in Kent, Humberside and Hertfordshire all exhibit relatively low levels of recent initiation.
 3. Motives for recreational provision vary significantly according to category and type of
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recreational provision; there are strong associations between certain types of recreation and specific motives. Activity level analysis highlights the complex and often multiple motives associated with different types of recreation.

- a). Financial Motives. At the farm level financial motives are the second most widely expressed in relation to recreational provision (42% at the farm level and 48% at the activity level). Financial motives are particularly strongly associated with recreational provision which is open to the public (76% of this category at the farm level) and associated types such as catering, rare breeds and farm trails. Low levels of financial motivation are exhibited by temporary recreational provision (24% at the farm level). Financial motives are particularly associated with interest motives at the farm level.
 - b). Interest Motives. Interest motives are the most frequently expressed motives, at the farm level (47%) but exhibit a much lower level at the activity level (28%). Interest motives are extremely strongly associated with recreational provision for personal use (85% at the farm level). Recreational provision for clubs and syndicates (36%) and temporary recreational provision (29%) are also strongly related to interest motives and associated types such as village sports pitches and airfield/gliding/parachuting. A link between the provision of certain types of recreation for personal use and wider recreational provision, for example riding facilities, is also identified.
 - c). Social Motives. A much lower proportion of farms expressed social motives than financial and interest ones (18% at the farm level, 29% at the activity level). Social motives are particularly associated with temporary recreation (41%) and to a lesser extent provision available by arrangement only (23%) and recreation open to the public (21%). Recreation types such as picnic sites (64%), open farms (46%) and educational visits (48%) exhibit a strong association with social motives. At the activity level there is a strong link between financial and social motives (21% of activities).
 - d). Altruistic Motives. Expressed by a relatively low proportion of farms (7% at the farm level and 17% at the activity level) altruistic motives are particularly associated with recreational provision available by arrangement (9%) and open to the public without booking (7%). Activities such as farm trails (17%), childrens play areas (17%), educational facilities (17%) and farm birthday parties (15%) are all particularly associated with altruistic motives.
 - e). Other Motives. The identification of 'other' motives (16% at the farm level and 13% at the activity level) outside the fourfold 'DART' classification highlights problems of
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employing this classification for recreation. Other motives reflect particularly imposition and obligation as a result of tenancy arrangements and tradition and tangential benefits. Other motives are strongly related to temporary provision (35%) and provision for clubs and syndicates (32%). Recreation types such as game and rough shooting and fishing feature strongly.

4. The initial decision about the initiation of the majority of recreational activities had most frequently been taken by a sole male decision-maker. A trend towards joint and increased female decision-making is observed. The majority of activities had only sought informal advice or information; financially motivated ones are more likely to have sought formal specialist advice, particularly in relation to planning. Capital investment varies considerably reflecting the wide variety of motives and types of recreational provision. Capital investment in many recreational activities is relatively low (44% had invested less than £500), however, a small number of activities involve considerable investments (over £50,000). Where multiple recreational activities occur farm level capital investment can be significant, for example 20% of farm investments in recreation are over £50,000. The overwhelming majority of recreational activities, especially those involving lower capital investments, are funded from non-recreation specific sources of capital, either farm business surpluses and/or farm business overdrafts. However, larger capital investments tend to involve recreation specific sources, such as loans and EU structural funds. Land commitment to recreational provision also varies considerably. The majority of recreational activities exhibit relatively low exclusive land requirements (less than 0.5 hectare), although there are a few notable exceptions, such as golf courses. Of particular interest is the non-exclusive mode of land use associated with many recreational activities, for example game shooting. This complementary use, alongside primary agriculture, is often significant in terms of area (in excess of 50 hectares) and has rarely been identified before.
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8. THE OPERATION AND EVOLUTION OF RECREATION.

The other two resource allocation outcomes of recreational provision operation and evolution, identified in Chapter 3, form the core of the analysis presented in this shorter chapter. The discussion is divided into two sections detailing contemporary issues relating to each of these two outcomes. The analysis of the 20 ethnographic case studies excludes activities for personal use, primarily to avoid confusion and focus the analysis on recreational provision involving consumers external to the farm business. It therefore relates to 84 of the 101 case study farm activities.

8.1. The Operation of Recreational provision.

This section presents analysis concerned with three elements relating to the operation of recreational activities: net income from recreation, promotion of recreation and labour use.

(i). NET INCOME FROM RECREATION.

The net income (operating profit) from recreational provision represents an important measure of its performance. The analysis of net income is divided into two stages. First, it presents net income from recreation at the aggregate farm level and secondly, at the activity level. The following observations must be borne in mind when interpreting the figures in relation to net income from recreational provision.

- I. Analysis at the activity level highlights that it is not always possible to attribute net income to a specific activity, for example where an admission charge is levied for a multi-faceted attraction. This is particularly true in relation to activities such as picnic sites, adventure play grounds, events put on as attractions, farm trails and rare breeds.
- II. Recreation does not always fulfil a direct income generating role, but instead may act as an attractor in conjunction with accommodation or retailing activities. In this case, it is not possible to attribute a net income directly to the recreational component.
- III. The calculation of net income includes direct costs and overhead costs attributable to recreational activities, for example paid labour, rent and depreciation. It does not include unpaid labour, interest and loan repayments (unless they can be attributed to a specific recreational activity) or the rental value of owned land and buildings.

Half of the twenty case study farms achieved net incomes of £1,000 or less from recreation and 75% net incomes of £10,000 or less (Table 8.1). At the farm level, net income from recreational provision per annum ranged from a small loss of £200 to a profit of £111,700. A mean net income of £16,900 per farm from recreation is skewed by the presence of two

farms achieving net incomes from recreation per annum in excess of £100,000. The median per farm for the sample is £1,100. McInerney and Turner (1991) reported a mean net profit for recreational activities (excluding equestrian activities) of £1,679 with 21% recording a loss and the majority (57%) a net profit of between £1 and £2,500. This is very comparable with the results of the analysis at the activity level which illustrates the fact that over a quarter of the activities realised net incomes of break even or less. This highlights the extent to which many recreational activities fail to contribute financially to the farm business and may even be a drain on farm resources. However, this disguises the fact that the majority of these were not financially motivated in the first place. Nonetheless, just over 10% of the individual activities associated with financial motives still realised net incomes of zero or less. The role of recreation within farm businesses is explored in Chapter 9.

NET INCOME FROM RECREATION (£)	FARMS (N)	ACTIVITY (N)	MEAN (£) PER FARM	FINANCIAL MOTIVES (N)	NON-FINANCIAL MOTIVES ¹ (N)
-500-0	4	29	-100	5	24
1-1,000	6	18	300	7	11
1,001-10,000	5	13	4,300	13	0
10,001-50,000	3	6	22,800	6	0
50,001 AND OVER	2	1	58,000	1	0
UNATTRIBUTABLE	-	17	-	16	1
TOTAL	20	84	16,900	48	36

Table 8.1. Net income from recreational provision - rounded to the nearest £100. (Source: Author's survey).¹ Non-financial motives include 'other' motives.

The net income generated from recreational provision varies considerably according to recreation type, motives for recreational provision (Chapter 7) and the scale of recreational provision. This is most evident at the activity level. Activities with low net incomes are, unsurprisingly, strongly associated with non-financial motives. This is also reflected in the type of recreational provision associated with low net incomes. It includes a range of traditional activities in the form of provision for clubs and syndicates, particularly game shooting and many altruistic events, such as farm open days, school visits and some traditional events such as sheep dog trials. Activities achieving modest net incomes from recreation tend to be permanent types with coarse fishing, horses for riding and riding facilities, some educational facilities and clay pigeon shooting. Activities achieving high net incomes include a mixture of traditional activities, such as coarse fishing and riding, and more innovative activities such as catering, motor sport and adventure play areas. The majority of these are open to the public without booking. It should also be remembered that

farms with multi-faceted visitor attractions also tend to feature amongst these higher net incomes.

It is extremely difficult to generalise about the relationship between net income and recreation type. For example, the range of net income identified in relation to coarse fishing activities for the case study farms is from £150-£22,000 with a mean of £5,138. In general, however, net income from recreation is strongly linked to financial motives and as such net income is likely to vary geographically in a similar way to motives. The following two cases illustrate examples of recreational activities generating minimal incomes:

Mr Y manages Farm 238 for a large company. The farm is in Cheshire and consists of 150 hectares of arable cropping which is share farmed in conjunction with the Co-operative Wholesale Society (CWS) and a 650 head pig herd which is a dam line nucleus herd producing high genetic quality breeding stock for a large UK livestock company. The arable cropping involves no input from staff on the farm, the farm simply provides the land as part of the share farming agreement. Much of the farm is bordered by woodland and is close to an urban area. The field margins adjacent to the woodland have never been cultivated (because of tree roots) and total approximately 3 hectares of land across the farm. These are rented by a local riding group for gallops. As part of their rental agreement they maintain and mow the field margins. The farm receives a nominal rent of 5 pence per year. (Mr Y, Farm 238).

Mr P operates Farm 627. The farm is an owner-occupied 208 hectare arable and horticultural holding producing cereals and soft fruit, some of which is retailed through a farm shop. The farm is expanding its agricultural operations and has recently acquired 50 hectares of land. The farm is situated in a river valley and has nearly 1 mile of riparian rights on both sides of the river. The farm has let the fishing rights on the river, since 1992, to a small local group of 12-15 anglers. Access to the river is across fields on the farm. There is no labour or capital commitment to the coarse fishing by the farm business, and the group polices its own membership. This is the only form of recreational provision on the farm. The farm business receives a notional rent of £100 per annum and usually a bottle of whisky! (Mr P, Farm 627).

These cases appear to be representative of a significant proportion of recreational activities which generate very low levels of operating profit. As such they represent a clear challenge to the pluriactivity concept which theoretically encompasses all activities contributing to farm business and household income regardless of their financial returns. The way in which previous studies have treated these activities is far from clear, although the significantly lower incidences of recreation reported in many of these studies, compared to that identified here, suggests that they have failed to engage with much of the 'cultural' component of recreation.

(ii). PROMOTING RECREATIONAL PROVISION.

The case study farms employ 14 different forms of promotion for their recreational activities.

In most cases, farms employ multiple forms of promotion. On some, this is integrated to promote a range of activities on the farm. On others, several forms are employed to promote an individual recreational activity. The use of road-side signs is the single most widespread form of promotion employed on the case study farms, with 13 out of the 20 farms using this method. Newspaper adverts and leaflets also feature strongly, being employed on 12 out of the 20 farms. Analysis at the farm level disguises the fact that many farms employ different types of promotion in relation to different types of recreational provision (Table 8.2).

FORM OF PROMOTION	FARMS LEVEL	ACTIVITY LEVEL	CATEGORY OF PROVISION (NUMBER OF ACTIVITIES)			
			OPEN TO GENERAL PUBLIC	BY ARRANGEMENT	CLUBS AND SYNDICATES	TEMPORARY EVENTS
Own Leaflet	12	42	32	7	0	3
Road-Side Signs	13	30	19	1	0	10
Newspaper Adverts	12	19	10	1	0	8
Marketing Group Leaflet	3	19	15	1	0	3
Official 'Tourist Attraction' Signs	2	17	14	0	0	3
No Active Promotion	8	14	3	1	8	2
Other Form of Promotion	7	12	4	3	4	1
Radio Adverts	6	11	8	1	0	2
National Farmers Union Publications	6	11	2	5	0	4
Marketing Undertaken by Outside Group	10	10	0	1	4	5
TV Adverts	1	7	6	0	0	1
Club/Group Publications	4	3	2	0	0	1
Poster Adverts	2	3	1	0	0	2
Magazine Adverts	2	3	3	0	0	0
TOTAL	20	84	39	12	13	10

Table 8.2. Forms of promotion employed. (Source: Author's survey).

At this level the production of an advertising leaflet is the single most widespread form of promotion. This method was employed in relation to 42 of the 84 individual activities. In contrast, newspaper advertising, the most widely employed method at the farm level, was actually only employed specifically in relation to 19 of the individual activities. This reinforces the valuable insights obtained through investigation at the activity level which are obscured, or even confused, by analysis at the farm level.

Activities employing their own leaflet are predominantly those which are open to the general public without booking. This disguises a variety of approaches, ranging from distributing leaflets directly to fishing tackle shops (Farm 424) and distributing leaflets via schools' registers (Farm 1180), to a mailshot of 150,000 leaflets to local residents to advertise an open farm (Farm 632).

The use of road-side signs is split between the promotion of recreational provision which is

open to the public without booking, primarily to catch passing trade, and one-off temporary recreational events for which this is the main form of promotion. Newspaper adverts are also strongly associated with these two types of recreational provision, especially temporary events such as open days, ploughing matches and sheep dog trials.

NFU publications are associated exclusively with educational activities for schools on farms. The NFU operates the National Association of Farms for Schools and produces educational materials on behalf of this group which members can use for school visits. It is interesting to note that the provision of educational facilities seems to be quite bi-polar in nature with some, particularly those connected to large farm 'attractions', being financially motivated at least to some extent (for example, Farm 632 has 6 classrooms and 100,000 school children visit each year - it also acts as a valuable method for attracting families back at the weekend), whereas on many other farms educational visits are one-off activities each year.

Of the activities for clubs and syndicates, the majority undertook no active form of promotion. In most cases, the recruitment of new members was a result of word-of-mouth and individual recommendation. Club or group publications tend to be associated with specific activities. For example, clay pigeon shooting on Farm 424 is advertised in the magazine 'Pull' dedicated to clay pigeon shooting.

Brown 'tourist' signs are present on only two of the twenty case study farms but relate to 14 individual activities, corresponding to a farm park and a farm activity park respectively. In both cases, they are seen as indispensable to the marketing of the business, providing a 'credibility factor' which could not be achieved with other methods. The farms in question both had to demonstrate sufficient visitor numbers to justify brown signage (although the criteria varied between the two areas in question) and pay for the signs themselves.

Perhaps the most unusual form of one-off publicity had occurred on Farm 576 where a well known pet goat had been 'stolen' (as a stunt by the owners) and held to ransom. The associated story and the return of the said goat generated sufficient publicity to attract coverage on regional television and in the local and national newspapers, which proved 'very good for business'!

Only two of the twenty case study farms are members of a regional FAG, (see Chapter 2), even though these organisations operate in all but one of the study area counties. The recreational facilities on the two farms concerned were both well-established prior to the

formation of these groups and the scale of recreational facilities on these farms reinforces the idea that FAGs tend to be associated with large facilities. Indeed, these were also the only farms with 'brown signage' (see Ilbery 1996). However, the effectiveness of the marketing role of these groups is brought into question by comments from both these operators.

I. Mr and Mrs J (Farm 632) were founder members of the Kent FAG. They highlighted the fact that;

'nobody wanted to run the group once the ADAS man left' (Mrs J, Farm 632).

This illustrates the role of ADAS (now FRCA and ADAS Consulting) advisors in these groups and perhaps confirms the notion that their role can be termed 'street level bureaucrats' (Cooper 1998). The group is still in existence but had not produced a marketing leaflet for the past year and there was little evidence that the group would produce one for the following year. All the members produce their own leaflets and are already members of other marketing groups, often specific to their type of attraction. This immediately highlights the key elements of time commitment and organisation required to maintain successful group activity. One problem which emerges is the relative weakness of the farm brand of many farm attractions. In some cases, the attractions are incidental to the farm and therefore the farm element is not a strong selling point. As a result, there is often relatively little to be gained for many farm attractions from a collaborative marketing leaflet in contrast to other 'farm services' such as accommodation where the farm element is often used as a key selling point (for example, farm holidays and the marketing of the Farm Holiday Bureau).

II. The N. Wales FAG is similarly inactive. Only 7 of the original 14 members remain and they failed to produce a leaflet for the 1998 season. ADAS organised the group. Originally, 2 geographically distinct groups were proposed based on North-West and North-East Wales but because of boundary problems and insufficient members the groups were amalgamated in 1995. The group has not met recently and Mr W (Farm 87) is disillusioned with their progress. He sees the group fulfilling solely a marketing function and identified seven specific problems with the groups current operation:

- a) the need to produce more promotional leaflets. Currently the group produces 10,000 leaflets (500,000 of the leaflet 'Top Attractions in N. Wales' are produced). Mr W himself produces 100,000 leaflets of his own;

- b) a requirement for a more professionally presented and distributed leaflet;
- c) the need for a professional part-time secretary to organise the group, because individual members have too little time;
- d) the need to implement formalised quality standards for membership because *'quality reflects on group as a whole'*;
- e) an increase in the membership fee (currently £250 per year) to support developments;
- f) the need to increase the membership to support a viable leaflet. The title of the leaflet has already been changed from 'Farm Attractions' to 'Farm and Countryside Attractions' to allow the group to include non-farm members;
- g) the need for better liaison with ADAS to access European structural funds to help fund future developments.

(iii). LABOUR CHARACTERISTICS OF RECREATIONAL PROVISION.

(a). Total Labour, Household and Hired.

On 14 of the 20 case study farms, there is either no or a very negligible household labour commitment to recreational activities (Table 8.3). Recreational activities only provided more than one full-time equivalent (FTE) job for a member of the farm household on three of the 20 case study farms. This is reinforced at the activity level. Only one specific recreational activity provided more than one FTE job for a farm household member, whereas 77 of the recreational activities provided either no or negligible employment for farm household members. This confirms the pattern reported by McInerney and Turner (1991) who reported that 35.3% of recreational activities (excluding equestrian ones) had no farmer or spouse labour associated with them, 51.5% had up to 0.25 FTE, 8.8% 0.25-1.0 FTE and 4.4% >1.0 FTE, with a mean of 0.17 FTE, the lowest of all the groups of diversification enterprises in their study. A very similar pattern emerges in relation to hired labour. The majority of activities have very low levels of hired labour, although a small number of activities are associated with very high levels of hired labour. Again, a similar pattern was reported by McInerney and Turner (1991) who reported 85.3% of recreational enterprises (excluding equestrian ones) had no hired labour, although none had more than 1 hired labour unit, which appears to reflect the recent growth of larger recreational activities. These low labour commitments reflect the fact that, in many cases, recreational activities are undertaken by clubs and syndicates and typically involve no direct household input. Further, many

recreational activities are very small scale and temporary, requiring low labour inputs from household or hired labour who spend the majority of their time working on other farm enterprises.

	LABOUR (FTE'S)	HOUSEHOLD						TOTAL (N)
		NONE	NEGLIGIBLE	UPTO 0.4	0.5-0.9	1.0-1.9	2.0-4.9	
HIRED	NONE	2	3	1	1			6
	NEGLIGIBLE ¹	2	6	1	2			8
	UP TO 0.4	5	29					34
	0.5-0.9		1					1
	1.0-1.9		2			1		2
	2.0-4.9		2	2		1		4
	5.0 AND OVER		1		1	1		6
	TOTAL (N)	4	10	1	2	2	1	20
		19	58	3	3	1	0	84

Table 8.3. Total labour commitment in recreational provision. (Source: Author's survey).

¹ No day-to-day commitment.

Key to cells.

Farm.	Activity.
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(b). Household Day-to-Day Roles and Gender.

Four of the 20 farms and 19 of the 84 activities have no household labour commitment to recreation, leaving 16 farms and 65 activities for analysis. Disaggregating these household labour inputs into recreational provision by gender reveals that men are solely responsible for recreational provision on 9 of the 16 farms with a household labour input (Table 8.4). Women are only solely responsible for recreational provision on 2 of the 16 farms. A similar pattern emerges in relation to specific recreational activities. A gender differentiation according to recreation type is also evident on the case study farms. Male day-to-day responsibility tends to be associated with shooting and fishing, other traditional and agricultural activities and also activities such as motor sport, perhaps reflecting mechanical skills and interest in machinery as a result of agricultural work, whereas female responsibility is more strongly associated with educational activities, catering and equestrian activities. Joint responsibility for overall recreational provision appears far less common, occurring on 3 of the 16 farms comprising 11 out of the 65 recreational activities. These tend to be activities with very negligible household labour inputs, such as short-term events.

These results contrast starkly with those of Evans and Ilbery (1996) in relation to farm-based accommodation. Their work reported that women dominated the labour input into accommodation operation. The land-based nature of many recreational activities (observed in Chapter 7) reflects a patriarchal outdoor land-management bias associated with 'agriculture', and less frequently involves use of matriarchal domestic space observed by Evans and Ilbery. Indeed, they made a similar observation when comparing outdoor camping and caravanning activities with indoor accommodation (bed and breakfast and self-catering).

		HOUSEHOLD DAY-TO-DAY ROLES (%)					
HOUSEHOLD LABOUR	LABOUR (FTE'S)	SOLE MALE	70-30	50-50	30-70	SOLE FEMALE	TOTAL (N)
	NEGLIGIBLE ¹	6 37	2	2 10	2	2 7	10 58
	UP TO 0.4	1 3					1 3
	0.5-0.9	1 1			1	2	2 3
	1.0-1.9	1		1	1		2 1
	2.0-4.9			1			1 0
	TOTAL (N)	9 41	0 2	3 11	2 2	2 9	16 65

Table 8.4. Household labour input and day-to-day roles by gender. (Source: Author's survey). ¹ No day-to-day commitment.

Key to cells.

Farm.
Activity.

8.2. The Evolution of Recreational provision.

Recreational activities are dynamic, exhibiting several evolutionary processes. These take two main forms. The first form comprises the planning of new, or withdrawal of existing, recreational provision. The second form entails expansion, contraction and modification of existing recreational activities. These are explored in more detail in the following two sub-sections.

(i). *PLANNED AND WITHDRAWN RECREATIONAL PROVISION.*

From the postal questionnaire survey only 3% of the responding farms are planning some form of new recreational provision, although it must be remembered that planning is

notoriously hypothetical. This conceals the fact that 5% of the farms with some form of recreational activity (including recreation for personal use) are planning or developing an additional activity or activities whereas only 1% of the farms with no current recreational provision were planning new recreational provision (Table 8.5). This reveals a significant difference compared to Bull and Wibberley (1976) who reported 14.1% of non-adopters developing recreation in the future. Similarly, McInerney and Turner (1991) identified recreation (excluding equestrian activities) as the highest growth prospect representing 28% of enterprises under consideration. A higher proportion than those responding farms planning recreational provision had withdrawn some recreational provision (7%). Withdrawal is also more strongly associated with farms still maintaining some form of recreational provision (12%), whereas only 5% of the farms with no current recreational provision had withdrawn it altogether in the past.

EXISTING RECREATIONAL PROVISION	RESPONDING FARMS	EVOLVED (%)	
	(N)	WITHDRAWN PROVISION ¹	NEW PROVISION PLANNED ¹
OPEN TO THE PUBLIC WITHOUT BOOKING ONLY	43	5	9
AVAILABLE BY ARRANGEMENT ONLY	60	15	3
CLUBS AND SYNDICATES ONLY	133	11	2
COMBINATIONS OF PERMANENT (1+2+3)	51	24	10
TOTAL PERMANENT ONLY	287	13	5
TEMPORARY ONLY	67	10	0
PERSONAL USE ONLY	299	10	3
PERMANENT AND TEMPORARY	145	12	12
PERMANENT AND PERSONAL	193	14	4
TEMPORARY AND PERSONAL	67	18	4
PERMANENT AND TEMPORARY AND PERSONAL	103	11	12
TOTAL PERMANENT AND TEMPORARY ONLY	432	16	7
TOTAL ALL FORMS OF RECREATION	1161	12	5
NO RECREATIONAL PROVISION	938	5	1
GRAND TOTAL	2099	7	3

Table 8.5. Existing recreational provision, planned new provision and withdrawal of recreational provision. ¹On some farms this applies to more than one activity. (Source: Author's survey).

Both the development of new recreation and the past withdrawal of recreation is more strongly associated with farms that currently have some form of recreation. The existing recreation profile of these farms (Table 8.5) gives an indication of the existing/remaining recreation most strongly associated with the planning of new provision and the withdrawal of

provision. New recreational provision is more prevalent on farms which already have recreation which is open to the public without booking (9%), a relatively high commitment to recreation. The opposite is true of farms where the only existing recreation is for clubs and syndicates. Here, only 2% are planning some form of new recreation. An even higher proportion planning new recreational provision is observed in relation to farms with combinations of permanent provision (10%) and both permanent and temporary recreational provision (12%). This tends to indicate that farms with an existing relatively high commitment to recreation, in terms of either category of recreation or multiple categories and types of recreational provision, are more likely to be planning new recreation.

It is possible to generate a more informative picture of planned and withdrawn recreational provision by examining the specific categories and types of recreational provision to which these changes correspond. Table 8.6 identifies the specific category of planned/withdrawn recreational provision. Of the farms withdrawing recreational provision, 20% failed to specify the category or type of recreational provision to which this related and a slightly higher figure of 28% corresponds to the farms planning new recreational provision. Where specified, 22% of the farms that had withdrawn recreational provision had stopped providing recreation open to the public without booking. Recreation for clubs and syndicates had been withdrawn by 20% of the farms and 18% had withdrawn some form of temporary recreational provision. On the basis of this evidence, the withdrawal of recreational provision is not strongly associated with any particular category of recreational provision. The provision of new recreation is most strongly associated with recreation open to the public without booking. In this case, 31% of the farms planning new recreational provision are developing this category of provision whereas only 10% of the farms planning new recreational provision are doing so for clubs and syndicates. This suggests that farms currently planning recreational provision are more likely to intend a greater commitment to recreational provision, especially as this category of provision has already been strongly associated with financial motives. Interestingly, planned provision of this category is relatively more strongly associated with farms that have no current permanent or temporary recreational provision. Another notable difference that emerges when the withdrawn and planned provision is divided according to the existing recreational provision of the farm is the relatively high proportion of temporary provision planned by farms with existing recreational provision compared with those having no current permanent or temporary recreational provision. It may be the case that the provision of temporary recreation is being used by farms with existing recreational provision as a way of attracting people onto the holding. This use of 'gimmicks' or new attractions for customers that have already been once or twice appears to mirror the 'quality treadmill'

effect observed in relation to many other farm tourism activities (Evans and Ilbery 1989).

CATEGORY OF PLANNED/WITHDRAWN RECREATIONAL PROVISION ¹	% FARMS					
	WITH CURRENT PERMANENT AND/OR TEMPORARY RECREATIONAL PROVISION		WITH NO CURRENT PERMANENT AND/OR TEMPORARY RECREATIONAL PROVISION		TOTAL	
	PROVISION WITHDRAWN	NEW PROVISION PLANNED	PROVISION WITHDRAWN	NEW PROVISION PLANNED	PROVISION WITHDRAWN	NEW PROVISION PLANNED
OPEN TO THE PUBLIC WITHOUT BOOKING	20	26	22	40	22	31
AVAILABLE BY ARRANGEMENT	12	7	12	8	12	9
CLUBS AND SYNDICATES	26	9	20	12	20	10
TEMPORARY	18	21	15	8	18	16
PERSONAL USE	15	2	12	8	13	4
UNSPECIFIED	15	30	21	24	20	28
TOTAL % (N)	100 (34)	100 (43)	100 (149)	100 (25)	100 (183)	100 (68)

Table 8.6. Category of planned new recreational provision and withdrawn recreational provision. ¹On some farms this applies to more than one category and type of recreational provision. (Source: Author's survey).

Little research has investigated the decline of farm diversification, although there is anecdotal evidence of a decline from the high water mark of the late 1980s. McInerney and Turner (1991) reported a failure rate of 1.5% for all diversified activities, and they attributed this as a 'normal' failure rate. In relation to recreation, a net loss of some 55 permanent recreational activities is recorded from the farms responding to the postal questionnaire survey (Table 8.7). Where farms specified the type of permanent recreational provision withdrawn, facilities for riding are the most abundant type. This had occurred on 30 farms in the past. Educational facilities are also well represented, with 23 farms having withdrawn their provision. There is no obvious explanation why these two activities should feature so highly in the types of recreation which have been withdrawn. Social events are the type of temporary recreation that had most commonly ceased to take place (Table 8.8). The transient nature of many of these social fixtures may well help to explain this pattern. Increasing competition from non-farm sources, such as big multi-national entertainment corporations, catering for family entertainment may also be an important factor contributing to the withdrawal of certain types of recreational provision. Ploughing matches feature as a net loser in this list, suggesting a decline in this traditional agricultural competition. This might reflect the increasing growth in the use of agricultural contractors and the loss of these skills, or increasing pressure on time. The declining number of holdings as a result of farm amalgamation, and lower levels of succession may also be affecting the incidence of these traditional activities. The decline of farm diversification activities clearly represents an important direction for future research.

Coarse fishing is the permanent recreation type most widely planned, accounting for 17 (27%) of the planned types (Table 8.7). This may reflect the suitability and relative ease of development of this type for farms, or an increased mobilisation of existing farm resources. Golf courses feature as a type undergoing planning and development reflecting the importance of farms for supplying areas of land sufficient to provide such facilities. Notably, the provision of 'other types' also features highly amongst planned new recreational provision. This appears to reflect the development of more innovative recreation types on some farms, as for example illustrated by the development of land yachts (Farm 62), a leisure centre and indoor sports facilities (Farm 303) and a tennis court linked to farm accommodation (Farm 1098). Farm open days are the only type of temporary recreational provision which feature highly as being planned (Table 8.8). This reflects an increasing awareness amongst farmers of the importance of public relations and raising the profile of farming. Again novel approaches are in evidence, with one farm in Hertfordshire planning a pumpkin festival at Halloween (Farm 2087).

PERMANENT RECREATION TYPE	FARMS (N)		
	PROVISION WITHDRAWN (N)	NEW PROVISION PLANNED (N)	NET SUPPLY TREND
Coarse Fishing.	3	17	+14
Other Types.	0	4	+4
Horses for Riding / Trekking / Lessons.	0	4	+4
Golf Course / Driving Range / Crazy Golf / Pitching.	2	5	+3
Nature Reserve / Country Park / Gardens.	0	3	+3
Laid out Farm Trails / Nature Trails / Cycle Trails.	0	3	+3
Access Agreements.	0	2	+2
Picnic Site.	0	1	+1
War Games / Paintballing.	4	4	0
Open Farm.	2	2	0
Catering: Farm Restaurant, Teas, Coffee Shop.	1	1	0
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	1	1	0
Game Fishing.	0	0	0
Museum.	0	0	0
Adventure Play Area / Children's Play Area.	0	0	0
Airfield / Gliding / Parachuting.	0	0	0
Village Sports Pitches.	1	2	-1
Rough Shooting	2	0	-2
Facilities for Models.	5	0	-5
Clay Pigeon Shooting / Gun Club.	8	1	-7
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	12	4	-8
Farm Birthday Parties.	11	0	-11
Game Shooting.	14	0	-14
Educational Facilities.	23	4	-19
Facilities for Riding: Gallops, Cross Country Course.	30	3	-27
TOTAL ACTIVITIES (FARMS)	119 (90)	64 (31)	-55

Table 8.7. Type of permanent recreational provision planned and withdrawn (where specified). (Source: Author's survey).

TEMPORARY RECREATION TYPE	FARMS (N)		
	PROVISION WITHDRAWN	NEW PROVISION PLANNED	NET SUPPLY TREND
Farm Open Days: Demonstrations, Working Farm Tours, Tractor Rides, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	0	7	+7
School Visits, College Visits.	0	1	+1
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	0	1	+1
Other Types.	0	1	+1
Historic Battle Re-enactments.	0	0	0
Motor Sport Events.	0	0	0
Sheep Dog Trials.	3	1	-2
Machinery Rallies.	2	0	-2
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	2	0	-2
Concerts / Fairgrounds / Circus.	3	0	-3
Organised Group Visits (Caravan Rallies/Group Camps)	7	0	-7
Ploughing Matches.	12	0	-12
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	14	1	-13
TOTAL ACTIVITIES (FARMS)	43 (29)	12 (11)	-31

Table 8.8. Type of temporary recreational provision planned and withdrawn (where specified). (Source: Author's survey).

Geographically, the withdrawal of recreational provision is most strongly associated with farms in Hertfordshire (14% of respondents), Kent (12%) and Gloucestershire (12%) (Table 8.9). In all three cases, this withdrawal is most strongly associated with farms with no remaining permanent and/or temporary recreational provision. All three counties have high incidences of recreational provision and it may, therefore, reflect competition between recreation providers resulting in the withdrawal of provision. Alternatively, it may be symptomatic of a decline in traditional activities and the gradual loss of participants from these activities. To some extent, both these explanations are supported by the trends in Tables 8.7 and 8.8, which highlight both a net loss of 'traditional activities' and losses in some less conventional activities, perhaps as a result of competition.

COUNTY	WITH CURRENT PERMANENT AND/OR TEMPORARY RECREATIONAL PROVISION			NO CURRENT PERMANENT AND/OR TEMPORARY RECREATIONAL PROVISION			TOTAL		
	(N)	SOME PROVISION WITHDRAWN ¹ (%)	NEW PROVISION PLANNED ¹ (%)	(N)	PROVISION WITHDRAWN ¹ (%)	NEW PROVISION PLANNED ¹ (%)	(N)	PROVISION WITHDRAWN ¹ (%)	NEW PROVISION PLANNED ¹ (%)
GWYNEDD	73	3	11	177	5	0	250	4	3
DURHAM	86	3	3	183	4	0	269	4	1
CHESHIRE	85	7	7	149	9	3	234	8	4
LEICESTERSHIRE	112	2	6	132	11	2	244	7	4
KENT	141	4	4	133	20	5	274	12	4
GLOUCESTERSHIRE	133	5	3	158	19	3	291	12	3
HERTFORDSHIRE	139	7	4	130	21	2	269	14	3
HUMBERSIDE	89	2	4	179	11	2	268	8	3
TOTAL	858	4	5	1241	12	2	2099	9	3

Table 8.9. The geographical distribution of planned new recreational provision and withdrawal of recreational provision. ¹On some farms this applies to more than one category and/or type of recreational provision. (Source: Author's survey).

The proportion of farms planning new recreational provision remains fairly similar throughout the study counties, typically 3-4% of the respondents. The only notable exception is the county of Durham which exhibits a low proportion (1%). This is perhaps indicative of a limited demand for new recreational provision in this county. The county of Kent is associated with the highest proportion of farms with no current permanent and/or temporary recreational provision planning to initiate new recreational provision. However, the proportion of farms in Kent with existing recreational provision planning additional provision is lower than the sample average. Coarse fishing features highly amongst the types of recreation planned by respondents in Kent, suggesting a possible link between horticultural production and perhaps irrigation reservoirs and coarse fishing provision. The highest proportion of farms with existing permanent and/or temporary recreational provision currently planning new provision is 11% in the county of Gwynedd. This suggests that farms with recreational provision in this county, many of which have already been observed as tourism orientated, are more likely to add additional activities, whereas farms without recreational provision are unlikely to venture into the market. Indeed, this is reflected in the types of recreation planned in the county with farms developing facilities such as mini and crazy golf, farm trails, rare breeds and go-karting.

(ii). EVOLUTION OF EXISTING RECREATIONAL PROVISION.

Of the 546 postal questionnaire survey respondents who completed the section pertaining to more detailed information about their recreational activities, 19% had expanded some or all of their existing activities, 7% had contracted them and 8% had modified them (with no net expansion or contraction) (Table 8.10).

RECREATIONAL PROVISION	RESPONDING FARMS (N)	% OF FARMS		
		EXPANDED SOME/ALL EXISTING ¹	CONTRACTED SOME/ALL EXISTING ¹	MODIFIED SOME/ALL EXISTING ¹
OPEN TO THE PUBLIC WITHOUT BOOKING	135	23	1	4
AVAILABLE BY ARRANGEMENT	201	11	2	2
CLUBS AND SYNDICATES	273	9	6	8
TEMPORARY	235	5	2	3
PERSONAL USE	282	1	2	2
TOTAL PERMANENT AND/OR TEMPORARY	478	21	7	8
TOTAL ALL FORMS OF RECREATION ²	546	19	7	8

Table 8.10. The evolution of existing recreational provision by category. ¹On some farms this applies to more than one type. ²Includes 17 farms which did not specify the category of recreational provision to which the evolution corresponded. (Source: Author's survey).

Recreational provision open to the public without booking is the category of provision most likely to have been expanded (23%). This is over twice the proportion identified with respect to any other category of provision. To some extent, the reverse is true of contracting recreational provision. Recreational provision open to the public without booking is far less likely to have been contracted (only 1%), compared to recreational provision for clubs and syndicates (6%). Recreational provision for clubs and syndicates features again as the category of recreational provision most likely to have been modified in some way (8%). On the basis of this evidence, it appears that the high degree of financial motivation associated with recreational provision open to the public without booking means that this category is more likely to expand and far less likely to contract than other categories. It also illustrates that recreation proves to be very successful for some farmers. Recreational provision for clubs and syndicates in particular appears more likely to contract and be modified and this may reflect the decline in land-based employment and, therefore, people particularly interested in the types of traditional activities which typify this category of provision. Many of these activities are also incompatible with the provision and expansion of open to the public activities, for example farm trails and game shooting/rough shooting. The following case serves to highlight the gradual evolution of a small recreational activity into a large business concern over a number of years, as a result of both chance and design. It also introduces the notion of a change in motives over time.

In 1988 Mrs J and her husband took over a PYO operation on an adjacent holding. This already had a small playground where children could play while their parents picked fruit. Mrs J and her husband noticed the attraction that the playground exerted for families bringing children and extended it. They then moved some of their own private collection of farm animals, including some rare breeds, to the site as an added attraction. It became increasingly popular and as a result Mrs J introduced a small entrance charge. The concept of an attraction was born and has grown into an extensive farm attraction with restaurant, gift shop, PYO, extensive collection of farm animals and pets. (Farm 632).

The preceding case also highlights the inapplicability of the search-based model of decision-making (Bowler *et al* 1996) which assumes an active search by the farm household for an alternative income source and not a gradual evolution involving elements of chance, design and experimentation. These observations are also borne out by the following case which highlights the 'quality treadmill' affect, observed by Evans and Ilbery (1989) in relation to accommodation, operating on a farm attraction.

Mr W, initially started a quad biking enterprise on a 28 day licence, for a first year using second hand quads. He then applied for full planning permission and started operating for the summer tourist season. He has since gradually developed the business, over a period of 4 years, to cater for corporate

entertaining, stag, hen and birthday parties, coarse fishing, and a large go-kart track, a farm trail, cafe, and adventure play area. Mr W sees the integration of activities as crucial to maximise resource use and minimise expensive labour. The continual modification and expansion of the enterprises is seen as crucial on the quality treadmill, to ensure that the business remains 'ahead of the game'. An example of this is the modification of the new go-karting circuit to include evening lighting so that evening and over-night races can be operated, extending the use of the track, especially on weekday evenings. Mr W is also planning to introduce two seater go-karts to permit disabled people to participate. (Farm 87).

In purely numerical terms, game shooting features as the type of permanent recreational provision most likely to have been expanded (Table 8.11). Game shooting is also associated with high levels of contraction of provision and is also the type most likely to have been modified. These high incidences of contraction probably reflect the high incidence of game shooting in the postal questionnaire respondents as a whole. Riding facilities are also quite dynamic, predominantly as an expanding type, but also in relation to contraction and modification. These are especially significant as they exhibit a lower overall incidence in the sample. However, as already shown (Chapter 5), the provision of most of these activities occurs primarily in the form available to clubs and syndicates rather than open to the public without booking. The following case illustrates an example of recreational contraction as a response to external pressure.

Mr B had contracted his clay pigeon shooting operations as a result of enforcement notices from the local planning authority because of increasing complaints from local residents about the noise (Farm 424).

Temporary recreational provision exhibits no strong associations with different evolutionary processes. However, it is interesting to note that farm open days are the most abundant form of contracted temporary recreational provision, suggesting that perhaps they are more transient (Table 8.12). Equally, however, this observation may reflect the greater incidence of this type in the sample. The ephemeral nature of some temporary provision is illustrated in the following case:

1. Case Characteristics.

Farm 726 is a 124 hectare owner-occupied dairy farm in Gloucestershire operated by Mrs Y and her husband. They have no dependants on the farm. Mr and Mrs Y run a herd of 150 pedigree Holstein-Friesian dairy cows and their followers. Mrs Y provides educational farm tours for children from local primary schools. These have occurred on a regular basis since 1980 and focus on milking the dairy cows with a purpose built viewing gallery in the milking parlour. No charge is made for the tours, and this is important because otherwise, especially with the transport costs, the schools would not be able to afford to send the children. Mrs Y feels that it is an extremely valuable and important educational activity and one which she enjoys organising and hosting.

Mr Y is indifferent about the school visits and plays little active part in them, although he is more than happy to accommodate the visits. The farm tours do not conflict with any of the agricultural activities of the farm business or absorb a significant amount of Mrs Y's time. However, Mrs Y had contracted the educational tours significantly from a peak of 20 to only 2 in the previous year. This is a direct response to economic pressure on the farm business, particularly as a result of reduced cull cow and calf values as a consequence of BSE. Mrs Y (a trained teacher) had taken part-time off-farm employment in order to supplement the income from the farm business.

2. Interpretation.

This case highlights the contraction of an altruistic activity that is strongly linked to Mrs Y's background as a teacher and her personal motives. It highlights the intrinsic links between economic activity on the one hand and non-economic activity on the other, and the way in which changes in economic circumstances can impact on non-economic 'cultural' recreation. It also reinforces the ephemeral nature of temporary recreational activities and illustrates the way in which recreation provides an opportunity for individuals to fulfil their own goals within a farm business.

PERMANENT RECREATION TYPE	EVOLVING PROVISION FARMS (N)		
	PROVISION EXPANDED	PROVISION CONTRACTED	PROVISION MODIFIED
Game Shooting.	23	5	7
Facilities for Riding: Gallops, Cross Country Course.	19	4	5
Horses for Riding / Trekking / Lessons.	7	4	1
Rough Shooting	5	2	1
Coarse Fishing.	4	6	2
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	4	2	0
Farm Birthday Parties.	4	1	0
Golf Course / Driving Range / Crazy Golf / Pitching.	4	1	0
Educational Facilities.	2	0	0
Access Agreements.	1	1	0
Game Fishing.	1	0	3
Clay Pigeon Shooting / Gun Club.	1	1	2
Laid out Farm Trails / Nature Trails / Cycle Trails.	1	0	1
War Games / Paintballing.	1	0	0
Facilities for Models.	1	0	0
Catering: Farm Restaurant, Teas, Coffee Shop.	1	0	0
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	1	0	0
Museum.	1	0	0
Airfield / Gliding / Parachuting.	1	0	0
TOTAL ACTIVITIES (FARMS)	82 (78)	29 (21)	22 (21)

Table 8.11. Type of permanent recreational provision evolved (where specified). (Source: Author's survey).

TEMPORARY RECREATION TYPE	EVOLVING PROVISION FARMS (N)		
	PROVISION EXPANDED	PROVISION CONTRACTED	PROVISION MODIFIED
Organised Group Visits (Caravan Rallies/Group Camps)	3	0	0
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	3	0	0
Motor Sport Events.	2	0	0
School Visits, College Visits.	1	0	1
Farm Open Days: Demonstrations, Working Farm Tours, Tractor Rides, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	0	5	3
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	0	1	1
Machinery Rallies.	0	1	0
Sheep Dog Trials.	0	0	1
Other Types.	0	0	1
TOTAL ACTIVITIES (FARMS)	12 (12)	7 (5)	7 (7)

Table 8.12. Type of temporary recreational provision evolved (where specified). (Source: Author's survey).

The counties of Gwynedd, Kent and Hertfordshire in particular show higher than average proportions of farms which had expanded some or all of their existing recreational provision (Table 8.13). This seems to reflect a response to a relatively high level of demand in these counties. The contraction of recreational provision is not particularly strongly associated with any individual county. The high levels of modifications of existing recreational provision reported for Gwynedd and Durham correspond particularly to upland game shooting activities, and especially grouse shooting, in these counties. It appears that these activities,

which tend to be associated with large estates, are more likely to have undergone modifications than lowland game shooting activities on farms in Kent and Hertfordshire (counties where shooting is also highly prevalent). This highlights once again differences within individual recreation type descriptors.

COUNTY	TOTAL WITH PERMANENT AND/OR TEMPORARY RECREATIONAL PROVISION (N)	% OF FARMS ¹		
		EXPANDED EXISTING	CONTRACTED EXISTING	MODIFIED EXISTING
GWYNEDD	28	29	4	17
DURHAM	43	15	11	18
CHESHIRE	48	16	8	4
LEICESTERSHIRE	56	16	5	3
KENT	94	31	9	7
GLOUCESTERSHIRE	69	17	4	4
HERTFORDSHIRE	95	23	7	8
HUMBERSIDE	45	15	2	9
TOTAL	478	21	7	8

Table 8.13. The geographical distribution of evolving permanent and temporary recreational activities. ¹On some farms this applies to more than one activity. (Source: Author's survey).

8.3. Summary.

This chapter has concentrated on the operation and evolution of recreational provision and identified four main trends.

1. The case study farms exhibit a wide range of net incomes from recreation. The majority of farms achieved relatively low net incomes (50% £1,000 or less at the farm level, 25% £0 or less at the activity level) highlighting the way in which many recreational activities contribute little or nothing financially to the farm business. Net incomes vary considerably according to recreation type, motives and scale. Those achieving low net incomes tend to be traditional activities available to clubs and syndicates, such as game shooting, and altruistically motivated temporary events, such as some farm open days. Higher net incomes are more strongly associated with recreational provision open to the public and a range of traditional and more innovative activities, often occurring as a recreational 'attraction' comprised of several different activities.
2. Farm businesses employ a wide variety of modes of promotion for their recreational activities. These largely reflect the type of recreational activity which they provide. Membership of regional FAGs is not widely employed by recreation providers and appears to relate primarily to larger scale operators.

3. Very few recreational activities are associated with a significant (more than 1 FTE) household or hired labour force. Indeed, the overwhelming majority of individual recreational activities involve no/negligible household or hired labour inputs, although a very small number of farms are associated with high levels of hired, typically large recreational complexes. In many cases, the low labour commitments correspond to the fact that many recreational activities are undertaken by clubs and syndicates or are temporary in nature and consequently require little or no direct household labour input. Household labour inputs are predominantly male. This tends to reflect a gender differentiation according to recreation type, particularly between indoor (female) and outdoor (male) activities.
 4. Recreational activities are dynamic, exhibiting a range of evolutionary processes. Planning new recreational provision is reported by 3% of the respondents, rising to 5% of those with recreation and falling to 1% of those with no current recreational provision. Planned new recreational provision is particularly associated with provision which is open to public and certain types, such as golf courses, and temporary events, such as farm open days. Recreational provision had been withdrawn by 7% of the farms (12% of those with remaining recreation and 5% had withdrawn from recreational provision altogether). The withdrawal of recreation is fairly evenly distributed between categories, and is especially associated with facilities for riding, educational facilities, game shooting, ploughing matches and social events. The expansion, contraction and modification of existing recreational provision is also widespread. Of those with recreation 19% had expanded some or all of their provision. Expansion is particularly associated with financially motivated recreational provision which is open to the public, and is more strongly associated with the 'high demand' areas of Gwynedd, Kent and Hertfordshire. Contraction of recreational provision is less widespread than expansion (7% of those with recreation). Contraction of provision involving clubs and syndicates is most common and temporary events, such as open days, also feature quite strongly and appear quite ephemeral in nature. Modification of existing provision is also widespread (8%), particularly amongst provision for clubs and syndicates.
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9. THE RELATIONSHIP BETWEEN RECREATIONAL PROVISION AND THE FARM BUSINESS.

This chapter broadens the analysis and explores the relationship between the provision of recreation and the farm business in two main ways. First, it explores the relationship between basic farm business and household characteristics and the provision of recreation. The analyses draw on a mixture of quantitative data collected by the postal questionnaire survey and qualitative data from the ethnographic case studies. This balance reflects the way in which different farm characteristics are more or less amenable to different types of analysis. The quantitative analyses are comprised of a range of frequency counts, percentage figures and basic statistical analyses in the form of the chi-square statistic (χ^2). These are employed to generate indirect explanations for the provision of recreation. Qualitative analysis draws on some quasi-qualitative data in the form of quotes taken from the postal questionnaire survey. It should be remembered that the questions presented in the postal questionnaire survey were predominantly closed in nature and, therefore, these are mostly unsolicited comments. As a result they tend to be brief '*snap shot*' anecdotes. Quantitative and qualitative data from the ethnographic case studies provide more direct explanations for the indirect relationships between farm characteristics and recreational provision. Secondly, the role of recreation within the farm business is examined. The centrality of recreation to farm businesses and the role of recreation in farm business adjustment are explored. Again, a mix of quantitative and qualitative data is employed.

9.1. Farm Characteristics and Recreational provision.

This section examines the relationship between five farm characteristics: type, size, tenure, household structure and succession status. These have all been identified in the conceptual framework as important factors influencing the development of recreational activities.

(i). *FARM TYPE.*

Farm type was one of the factors employed in the original stratification of sampling areas. This is reflected in the dominance of different farm types in different areas (Table 9.1). It is important to note that these also inherently encapsulate associations between farm size, labour, capital requirements and flexibility (See Bowler 1992b).

An initial examination of the relationship between farm type (Table 9.2) and recreation reveals both general and specific patterns (more detailed analysis and explanations are presented subsequently). Overall, focusing on the aggregate permanent recreational provision, a statistically significant correlation (χ^2_7 15.9, $P < 0.05$) exists between the provision of permanent recreational activities and farm type. Permanent recreation is most strongly

associated with horticultural holdings (44% of the responding farms with horticulture have some form of permanent recreational activity). In contrast, farms with beef production exhibit the lowest proportion having permanent recreation (31%). Of the remaining types, 'holdings' with no agricultural production, arable cropping, and pigs and poultry have a greater proportion of recreation than the sample mean. Sheep production and dairying production are both associated with a fractionally lower proportion of recreation than the sample mean (34%).

In terms of temporary recreational activities, the overall pattern of distribution between farm types is broadly similar to that of the permanent ones. Again it exhibits a statistically significant (χ^2_7 19.2, $P < 0.01$) relationship. The one notable difference from permanent recreational provision is for 'holdings' with no agricultural production. These exhibit the second highest percentage of permanent recreational provision and the second lowest percentage of temporary recreational provision.

COUNTY	% OF RESPONDING FARMS								
	GWYN	DURH	CHES	LEIC	KENT	GLOU	HERTS	HUMB	MEAN
FARM TYPE									
ARABLE	11	46	31	56	67	55	89	91	59
SHEEP	76	59	18	37	30	32	13	12	36
BEEF	67	64	24	47	21	48	22	29	42
DAIRY	18	25	59	31	9	40	12	7	26
HORTICULTURE	2	0.5	2	1	34	4	2	2	6
PIGS/POULTRY	4	4	8	5	4	6	9	28	9
OTHER	4	0.5	5	2	3	2	2	0	2
NO AGRICULTURAL PRODUCTION	1	0.5	3	2	2	2	1	0.5	1

Table 9.1. The distribution of farm types between the county study areas (Source: Author's survey).

However, this overall analysis cannot relate the provision of recreation to specific farm types because 56% of the responding farms identified two or more farm types and the associations between recreational provision and specific farm types become obscured. Indeed, the overall differences between types are relatively small. Some more detailed nuances emerge when the sample is sub-divided according to specific farm-type combinations (although these generic farm-type groups still disguise a wide range of intra-group variation). A more detailed examination of individual farm-type combinations does not reveal any statistical significance. This is unsurprising because at this specific level, it is more likely to be different types of recreation which are associated with different farm types

rather than the provision of recreation generally.

Notably, permanent recreation is found on 39% of farms with arable cropping. This rises to 40% when farms with only arable cropping enterprises are considered, 45% on farms with arable cropping and horticultural enterprises, and 47% on farms with arable cropping and sheep and arable cropping and dairy enterprises. In contrast, farms with arable and beef production have 34% and arable-pigs/poultry enterprises 37%. It is also possible to divide the sample according to the number of different types of agricultural enterprises. In this case, it appears that permanent recreation is slightly associated with mixed farming systems consisting of two or three main enterprise. In the case of temporary recreational activities, a gradual progression exists. Single type farms have the lowest level of temporary activities, while farms with four main types have the highest. More specifically, single type pigs and poultry and beef have the lowest proportions (6% and 8% respectively), while farms with arable and sheep production have the highest proportion (33%). The general association between recreational provision and holdings consisting of multiple enterprises appears to reflect the inherent link between multiple enterprises and larger holdings and their associated labour flexibility and resource availability.

The association between farm type and recreational provision as a whole may disguise the extent to which different farm types provide financially motivated recreational provision. However, no strong differences emerge in relation to the main farm types when the sample is disaggregated in this way (Figure 9.1). Notably, recreational provision on farms with other types of production and no agricultural production exhibits a far higher degree of financial motivation, confirming the role of recreation on many of these holdings.

		TOTAL RESPONDING FARMS (N)	OPEN TO THE PUBLIC WITHOUT BOOKING (%)	AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY (%)	ONLY AVAILABLE TO MEMBERS OF PRIVATE CLUBS, GROUPS OR SYNDICATES (%)	TOTAL PERMANENT RECREATIONAL ACTIVITIES (%)	MEAN NUMBER OF PERMANENT RECREATION CATEGORY- TYPES PER FARM	TEMPORARY RECREATIONAL ACTIVITIES (%)
OVERALL	ARABLE CROPPING	1199	9	18	27	39	2.3	23
	SHEEP PRODUCTION	729	9	15	18	33	2.1	19
	BEEF PRODUCTION	856	8	13	18	31	2.1	17
	DAIRYING	530	5	14	21	32	2.0	18
	HORTICULTURE	128	14	23	26	44	2.8	29
	PIGS/POULTRY	179	8	15	23	35	2.4	18
	OTHER TYPE	46	4	13	17	26	2.6	11
	NO AGRICULTURAL PRODUCTION	40	10	20	30	42	2.7	13
χ^2_7			14.4, P<0.05.	14.3, P<0.05.	28.1, P<0.01.	16.3, P<0.05.	102, P<0.01.	19.2, P<0.01.
SINGLE TYPE	ARABLE CROPPING	397	10	17	27	40	2.3	19
	SHEEP PRODUCTION	97	14	13	13	30	2.0	11
	BEEF PRODUCTION	79	9	10	10	24	2.1	8
	DAIRYING	236	4	13	15	25	1.6	11
	HORTICULTURE	44	9	20	14	34	3.7	20
	PIGS/POULTRY	16	6	6	19	31	1.0	6
	OTHER TYPE	17	0	18	12	24	1.3	12
	NO AGRICULTURAL PRODUCTION	36	11	19	31	47	2.5	11
	TOTAL	922	9	15	20	33	2.2	15
TWO TYPES	ARABLE AND SHEEP	110	12	25	28	47	2.7	33
	ARABLE AND BEEF	164	7	13	24	34	1.9	20
	ARABLE AND DAIRY	88	7	16	35	47	1.8	30
	ARABLE AND HORTICULTURE	40	23	23	30	45	3.2	25
	ARABLE AND PIGS/POULTRY	70	4	17	29	37	2.2	16
	BEEF AND SHEEP	231	11	10	14	29	2.1	16
	OTHERS	100	7	12	15	27	1.9	9
	TOTAL	803	9	15	22	35	2.2	20
THREE TYPES	ARABLE, SHEEP AND BEEF	142	6	17	19	34	1.9	19
	ARABLE BEEF AND DAIRY	57	7	21	21	37	2.5	23
	OTHERS	118	6	16	25	37	1.9	25
	TOTAL	317	6	17	21	36	2.0	22
FOUR TYPES	ARABLE, SHEEP, BEEF AND DAIRY	22	5	5	27	36	0.9	23
	OTHERS	35	9	20	23	31	4.5	31
	TOTAL	57	7	14	25	33	3.0	28
χ^2_{19}			30.2, P<0.05.	22.8, (NS)	44.6, P<0.01.	29.4, (NS).	207, P<0.01.	50.8, P<0.01.

Table 9.2. Recreation and existing on-farm agricultural resource allocations (Source: Author's survey).

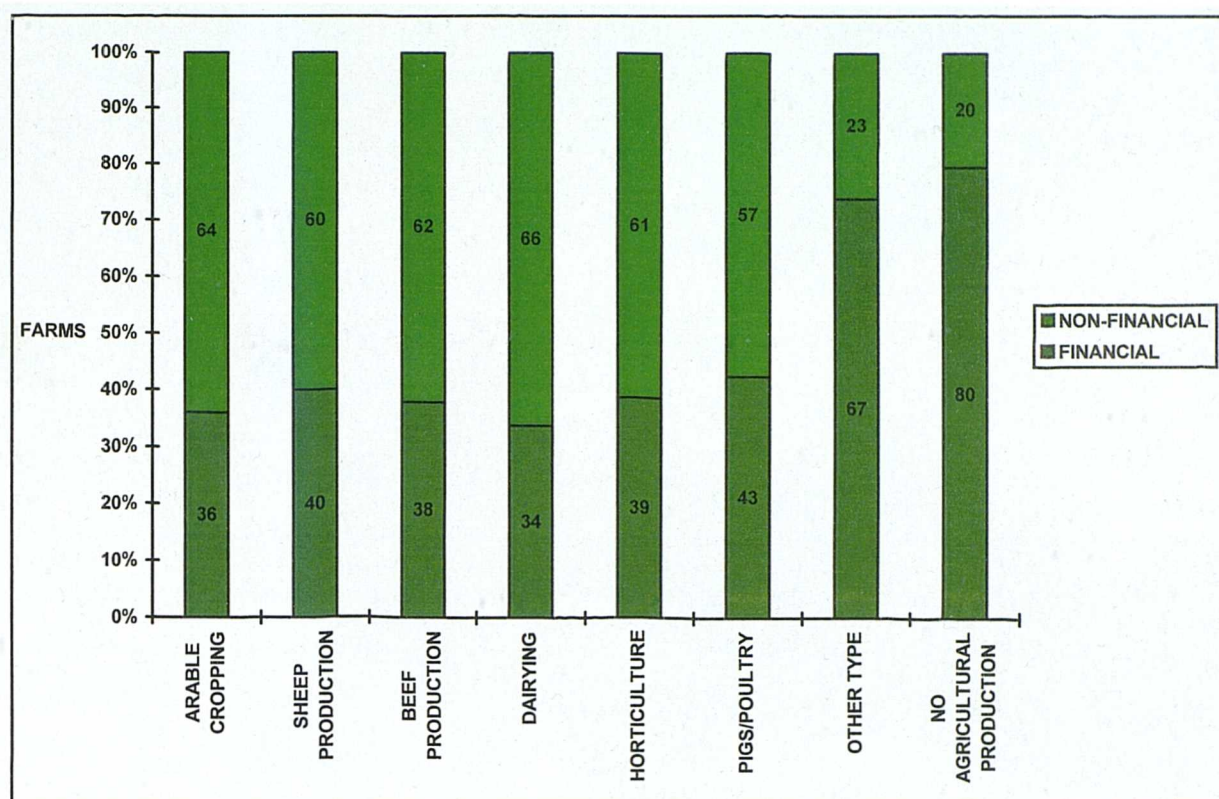


Figure 9.1. Relative degree of farm-level financial motivation associated with recreational provision by farm type. (Source: Author's survey).

The higher proportion of farms with arable enterprises having recreation, both permanent and temporary, may reflect the fact that these farms tend to have more land, labour and capital and, therefore, greater flexibility in how they allocate their resources. This is confirmed to some extent in Tables 9.3, 9.4 and 9.5 which illustrate that, of the case study farms, those with arable cropping enterprises have made on average the highest capital investment per financially motivated recreational activity. They also have relatively high levels of land and labour commitment to recreation. These farms are also more likely to be corporately managed rather than family holdings and, therefore, may be better placed to exploit business opportunities. This is, however, somewhat surprising as arable farms are generally regarded as having less need to diversify in relation to accommodation (see Evans 1991) and in relation to general diversification (see McInerney *et al* 1989) than other farm types, yet this appears to be reversed here. This possibly reflects the fact that arable farms have greater opportunities to provide recreational activities rather than necessarily a strong need to diversify their income base. It appears that recreation is more compatible with arable production than many other forms of diversification, although a strong link between arable production systems and the provision of contracting services has been observed (Ilbery 1992).

The contraction of some sectors of horticultural production in the UK (see Ilbery 1985b for the Vale of Evesham) may mean that these holdings are more economically constrained. Equally, redundant buildings and other ancillary resources and the small farm size associated with horticultural activities may also be important factors promoting the development of recreation on these holdings. Alternatively, the historical location of horticultural production on the urban fringe may mean that these farms are now better placed to take advantage of a market demand for recreational provision. The case study farms with horticultural enterprises exhibit the second highest average level of capital investment per recreational activity (Table 9.3) of all farm types. They also have relatively high land and labour commitments to recreation in comparison to other farm types. This may reflect the high labour input associated with horticultural production and the use of surplus labour to support recreational activities.

The low proportion of dairy farms with recreation reflects the fact that such systems are typically constrained by the inflexible day-to-day working practices. Indeed, the case study farms with dairy enterprises exhibit low levels of capital, labour and land resource commitment to recreational activities (Tables 9.3, 9.4 and 9.5), tending to confirm this position. The relative profitability of the dairy sector in recent years may have also contributed to a lower number following this pluriactive pathway as observed in diversification research before (see Bateman and Ray 1994). This is supported by these two comments;

"at the moment dairy farming is providing a satisfactory income" (Farm 798).
"large intensive dairy farm, no time" (Farm 1192).

Similarly, the low proportion of farms with sheep and beef production systems having recreational provision may reflect the strong association between these production systems and marginal upland areas located away from large centres of population. On the case study farms, the presence of beef production systems is associated with relatively low levels of capital investment in recreational activities in comparison to the other farm types. Labour inputs are also lower but there is relatively little difference in exclusive and non-exclusive land use between farms with beef production and other types of production. It appears that, in terms of resource allocation to recreational activities, there is relatively little difference between farms with beef production enterprises and other enterprises. One possible explanation for the lower overall proportion of these farms with recreational activities is that historically they have never been highly profitable and, therefore, have little accumulated capital. More specific constraints associated with beef production are articulated in the following cases:

"cattle need peace and quiet" (Farm 1321);
"breed bulls" (Farm 191).

MOTIVATION FARM TYPE	MEAN CAPITAL INVESTMENT PER ACTIVITY (£)		NUMBER OF RECREATIONAL ACTIVITIES	
	FINANCIAL	NON-FINANCIAL	FINANCIAL	NON-FINANCIAL
ARABLE CROPPING	20,685	336	20	22
SHEEP PRODUCTION	13,746	443	35	7
BEEF PRODUCTION	9,642	483	19	6
DAIRYING	4,000	373	2	11
HORTICULTURE	16,545	1,491	20	11
PIGS/POULTRY	0	0	0	2
OTHER TYPE	0	0	0	0
NO AGRICULTURAL PRODUCTION	8,125	0	4	0

Table 9.3. Mean capital investment and motivation per activity by farm type (Source: Author's survey).

MOTIVATION FARM TYPE	MEAN LAND USE PER ACTIVITY (HA)				NUMBER OF RECREATIONAL ACTIVITIES	
	FINANCIAL		NON-FINANCIAL		FINANCIAL	NON-FINANCIAL
	EXCLUSIVE	NON-EXCLUSIVE	EXCLUSIVE	NON-EXCLUSIVE		
ARABLE CROPPING	1.9	1.2	1.1	3.1	20	22
SHEEP PRODUCTION	1.5	1.3	0.6	3.9	35	7
BEEF PRODUCTION	1.5	1.4	0.8	2.5	19	6
DAIRYING	0.5	2.0	0.8	3.3	2	11
HORTICULTURE	1.6	0.9	1.3	3.0	20	11
PIGS/POULTRY	0	0	1.5	3.0	0	2
OTHER TYPE	0	0	0	0	0	0
NO AGRICULTURAL PRODUCTION	1	0	0	0	4	0

Table 9.4. Mean exclusive and non-exclusive land allocation to recreational activities by farm type and motivation. (Source: Author's survey).

MOTIVATION FARM TYPE	MEAN TOTAL LABOUR FTE PER ACTIVITY		NUMBER OF RECREATIONAL ACTIVITIES	
	FINANCIAL	NON-FINANCIAL	FINANCIAL	NON-FINANCIAL
ARABLE CROPPING	0.5	0	20	22
SHEEP PRODUCTION	0.4	0	35	7
BEEF PRODUCTION	0.3	0	19	6
DAIRYING	0	0	2	11
HORTICULTURE	0.5	0	20	11
PIGS/POULTRY	0	0	0	2
OTHER TYPE	0	0	0	0
NO AGRICULTURAL PRODUCTION	2.0	0	4	0

Table 9.5. Mean total labour commitment (FTEs) to recreational activities by farm type and motivation (excludes negligible commitments - see Chapter 8). (Source: Author's survey).

Personal factors may also be an important factor constraining the development of recreation on these farms. Surprisingly, on the case study farms, sheep production systems are associated with relatively high average levels of resource inputs. Bull and Wibberley (1976), Davies (1983) and Ilbery (1988) have all identified correlations between livestock production,

especially beef and sheep, and recreation. This pattern is reversed in this sample, although there are strong interactions between arable and beef, and arable and dairy. The wider remit of this study perhaps explains some of this difference. Indeed, the provision of financially motivated recreational activities is slightly more strongly associated with beef and sheep production systems than with arable systems, which may help to explain why this trend has been observed in previous research.

Farms with 'other' types of agricultural production are involved in a range of activities. The production of hay is the main type; others included heifer rearing, herbage seed production and forestry. Although these farms exhibit a relatively low level of recreation, they do include some farms with unusual types of production which could act as an attraction in themselves. Examples include Farm 422 which is engaged in ostrich production and Farm 1595 where goat milking and cheese production are taking place. In contrast, the relatively high level of recreation correlated with farms with no agricultural production appears to relate to farms disengaging from agriculture through the provision of recreation. This is reinforced if the size of the businesses with no agricultural production is considered. Of those respondents to the postal questionnaire survey with no agricultural production, and permanent and/or temporary recreation, 55% are up to 19 hectares in size. In contrast, only 5% of the farms with permanent and/or temporary recreation in the sample as a whole are up to 19 hectares in size. This tends to confirm that these farms are too small agriculturally and undertake other activities to support their incomes.

More specific factors relating to farm type are highlighted by the comments from the following farmers. Clearly, very precise factors have played a part in inhibiting the development of recreation:

"maintaining [a] salmonella free egg laying flock (100,000 birds)" (Farm 1110);
"disease free pig herd [sic]" (Farm 1156);
"strict hygiene restrictions [because of] verticillium wilt disease [of hops]" (Farm 1581);
"intensive fruit [production], unsuitable [for recreational provision]" (Farm 609);
"hop wire work [is] unsuitable [for recreational activities]" (Farm 630);

It is possible to take the analysis of farm type one stage further to examine links between individual types of permanent recreation (Table 9.6). Detailed analysis of simple farm types and specific types of recreation has rarely been undertaken before. It reveals a number of interesting links, although it should be remembered that analysis by these simple types obscures more complex interactions occurring where farms have more than one type of

agricultural production. For example, 15% of the responding farms with pig/poultry production have some form of game shooting, yet the majority of these farms also have arable enterprises. Game shooting is similarly strongly associated with arable production. Indeed, it is arable production systems which would appear more compatible with game shooting than pig/poultry production. Successful game shooting requires quite large areas of land on which to release the reared birds. Many arable crops provide ideal cover for released birds.

Other notable positive links include coarse fishing and horticultural production. This may be related to the provision of irrigation reservoirs associated with high value horticultural crops. Indeed, this is the case on Farm 530;

Mr D had constructed a reservoir with the primary purpose of irrigating a large area of soft fruit. The reservoir had been stocked with fish and is now successfully fulfilling a dual role as a day ticket coarse fishery and irrigation reservoir (Farm 530).

However, the presence of coarse fishing on farms with horticultural production is not always linked in such a way. In the case of Farm 503, the two are completely incidental;

Horticultural production forms a major component of the cropping on farm 503, the farm also operates large coarse fishing enterprise. However, the two are unconnected, the fishing being located in flooded gravel extraction workings on the farm (Farm 503).

Facilities for riding are very strongly associated with farms with no agricultural production, suggesting that this enterprise may represent a very amenable route for exit and disengagement from farming or equally a hobby farming entry route. For example, Farm 729 is a small farm divided between set-aside and horse grazing. A similar pattern exists in relation to clay pigeon shooting, horses for riding and motor sports. Descending Table 9.6, the relationships between recreation type and farm type become less distinct as the sample size falls.

Repeating this analysis for temporary recreation (Table 9.7) reveals similar correlations between specific types of recreation and farm types. In many cases, these mirror the overall pattern observed previously, so for example the high level of recreation associated with horticultural enterprises is mirrored in the high proportion of farms with horticulture having farm open days and riding events. Elsewhere, sheep dog trials are, predictably, associated most strongly with farms with sheep production, and ploughing matches with arable and horticultural modes of production. This continues to confirm the notion that, rather than

being necessarily a form of diversification, many recreational activities are a simple extension of normal farming activities.

	% FARMS								TOTAL FARMS (N)
	ARABLE	SHEEP	BEEF	DAIRYING	HORTICULTURE	PIGS/POULTRY	OTHER TYPE	NO AGRICULTURAL PRODUCTION	
Game Shooting.	17	12	11	10	7	15	11	8	256
Rough Shooting.	11	10	8	6	11	11	11	8	189
Coarse Fishing.	7	7	5	8	17	7	11	5	144
Facilities for Riding: Gallops, Cross Country Course.	6	4	4	5	6	5	11	23	111
Educational Facilities.	6	6	4	6	13	8	7	0	106
Clay Pigeon Shooting / Gun Club.	7	5	4	4	5	4	4	15	105
Horses for Riding / Trekking / Lessons.	5	2	3	2	7	6	7	25	90
Open Farm.	5	4	3	3	12	6	7	3	73
Game Fishing.	4	4	3	3	3	2	0	3	70
Access Agreements.	3	4	3	2	5	1	0	3	55
Picnic Site.	2	2	2	1	6	3	4	0	33
Village Sports Pitches.	2	2	1	2	2	0	0	3	31
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	2	1	1	1	1	2	7	5	30
Facilities for Models.	2	1	1	2	3	2	2	0	30
Laid out Farm Trails / Nature Trails / Cycle Trails.	1	1	2	2	5	1	2	0	28
Catering: Farm Restaurant, Teas, Coffee Shop.	1	1	1	1	4	2	2	3	27
Nature Reserve / Country Park / Gardens.	1	2	1	1	3	1	0	0	26
Farm Birthday Parties.	1	1	1	2	4	2	7	0	22
Adventure Play Area / Children's Play Area.	1	1	1	1	5	1	4	3	21
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	1	1	1	1	5	2	4	3	21
Golf Course / Driving Range / Crazy Golf / Pitching.	1	0	0	0	4	0	0	0	16
War Games / Paintballing.	1	0	0	1	1	1	2	5	13
Museum.	1	1	0	0	2	0	0	0	12
Airfield / Gliding / Parachuting.	0	0	0	0	2	1	0	3	9
Other Types.	1	1	1	0	1	1	4	0	12
TOTAL FARMS (N)	1199	729	856	530	128	179	46	40	2099

Table 9.6. Individual types of permanent recreation and farm type (arranged in descending order of incidence) (Source: Author's survey).

	% OF RESPONDING FARMS								TOTAL FARMS (N)
	ARABLE	SHEEP	BEEF	DAIRYING	HORTICULTURE	PIGS/POULTRY	OTHER TYPE	NO AGRICULTURAL PRODUCTION	
Farm Open Days: Demonstrations, Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	11	9	8	9	20	12	4	0	189
Organised Groups (Caravan Rallies / Group Camps).	4	4	4	4	5	2	2	8	72
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	3	1	2	3	7	2	7	5	50
Motor Sport.	3	2	2	2	1	3	0	0	40
Ploughing Matches.	3	1	1	1	4	3	0	0	33
Sheep Dog Trials.	1	3	1	1	1	1	0	0	21
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	1	1	1	1	0	1	4	0	20
Machinery Rallies.	1	1	1	0	2	1	0	3	15
School Visits, College Visits.	1	1	1	1	0	0	0	0	13
Concerts / Fairgrounds / Circus.	1	1	1	0	0	1	0	0	12
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	0	0	0	0	0	0	0	0	5
Historic Battle Re-enactments.	0	0	0	0	2	0	0	0	4
Other Types.	0	0	0	0	0	0	0	0	2
TOTAL FARMS (N)	1199	729	856	530	128	179	46	40	2099

Table 9.7. Individual types of temporary recreation and farm type (arranged in descending order of incidence) (Source: Author's survey).

(ii). FARM SIZE.

The responding farm businesses are most commonly between 20 and 99 hectares in size (45%). Table 9.8 indicates that farms up to 19 hectares accounted for 7% of the respondents, whereas businesses with 100-299 hectares made up 34% of the respondents and farms over 300 hectares 14% of the respondents. This conceals significant variations between the eight county study areas (Table 9.8).

A distinct pattern emerges between farm size and the presence of recreation (Table 9.9). The proportion of responding farms with permanent recreation in each size range forms an exponential distribution, which is strongly associated with increasing farm size and is statistically significant ($\chi^2_3 = 74$, $P < 0.01$). Permanent recreation is more strongly associated with large farms. Indeed, some 58% of the responding farms over 300 hectares have permanent recreation. It is likely that the larger farms are in a better position to allocate land

and capital resources to recreational activities without unduly affecting their agricultural activities. They are also better placed to use land as collateral for borrowing to fund developments and are more likely to encapsulate a suitable location for a recreational activity, such as good road access.

FARM SIZE (HECTARES)	% OF RESPONDING FARMS								
	GWYN	DURH	HERTS	HUMB	KENT	GLOU	LEIC	CHES	MEAN
UP TO 19	7	4	5	5	7	9	8	15	7
20-99	55	52	23	32	39	47	46	70	45
100-299	28	38	44	48	31	31	37	14	34
300 AND OVER	10	7	28	15	23	13	11	1	14

Table 9.8. The size of responding farm businesses by study area (Source: Author's survey).

This assertion is confirmed by analysis of the case study farms (Tables 9.10, 9.11 and 9.12). Average capital investment in financially motivated recreational activities exhibits a general increase with increasing farm size. A similar relationship also exists between recreational land use and farm size. Surprisingly, there is no such relationship between labour commitment to recreational provision and farm size and, in fact, the reverse appears to be true with the smallest farms. Those up to 19 hectares, have the greatest labour commitment per recreational activity, this appears to reflect the diversion of labour to recreation because, agriculturally, a small holding is unable to support whole labour units.

The influence of farm size is further demonstrated by looking at the average number of different types of recreation. This exhibits a steady increase from an average of 1.7 different category-types on farms up to 19 hectares to 2.7 on farms over 300 hectares. This link reinforces the importance of land resources in the provision of recreation. Clearly, the largest farms are least constrained in their development of recreation. A similar pattern is reflected in the presence of temporary recreation on these farms. Again, it is the largest farms that exhibit the highest proportion of temporary recreation. This correlation between large farms and recreational provision helps to explain the high incidence of recreation observed in the counties of Kent and Hertfordshire, which both exhibit high proportions of large farms. Conversely, the low levels of recreation observed in the counties of Gwynedd, Durham and Cheshire can, in part, be related to the lower incidence of responding large farms in these counties.

FARM SIZE (HECTARES)	RESPONDING FARMS				χ^2_3
	UP TO 19	20-99	100-299	300 AND OVER	
OPEN TO THE PUBLIC WITHOUT BOOKING (%)	6	5	10	18	43, P<0.01.
AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY (%)	14	12	16	26	29, P<0.01.
ONLY AVAILABLE TO MEMBERS OF PRIVATE CLUBS, GROUPS OR SYNDICATES (%)	10	14	26	40	88, P<0.01.
TOTAL PERMANENT RECREATIONAL ACTIVITIES (%)	25	26	39	58	74, P<0.01.
MEAN NUMBER OF PERMANENT RECREATION CATEGORY-TYPES PER FARM	1.7	1.7	2.3	2.7	417, P<0.01.
TEMPORARY RECREATIONAL ACTIVITIES (%)	9	11	22	36	89, P<0.01.
TOTAL RESPONDING FARMS (N)	143	939	721	290	

Table 9.9. The relationship between farm size and recreational provision (Source: Author's survey).

Interestingly, when the relative degree of farm-level financial motivation and farm size are disaggregated, a u-shaped distribution strongly skewed towards farms up to 19 hectares in size becomes apparent (Figure 9.2). The provision of recreational activities overall exhibits a strong correlation with increasing farm size, however, a much greater proportion of recreational activities on farms up to 19 hectares in size are financially motivated than those recreational activities occurring on farms in the 20-299 hectare size range. This provides a clear indication that these small farms are not viable agriculturally.

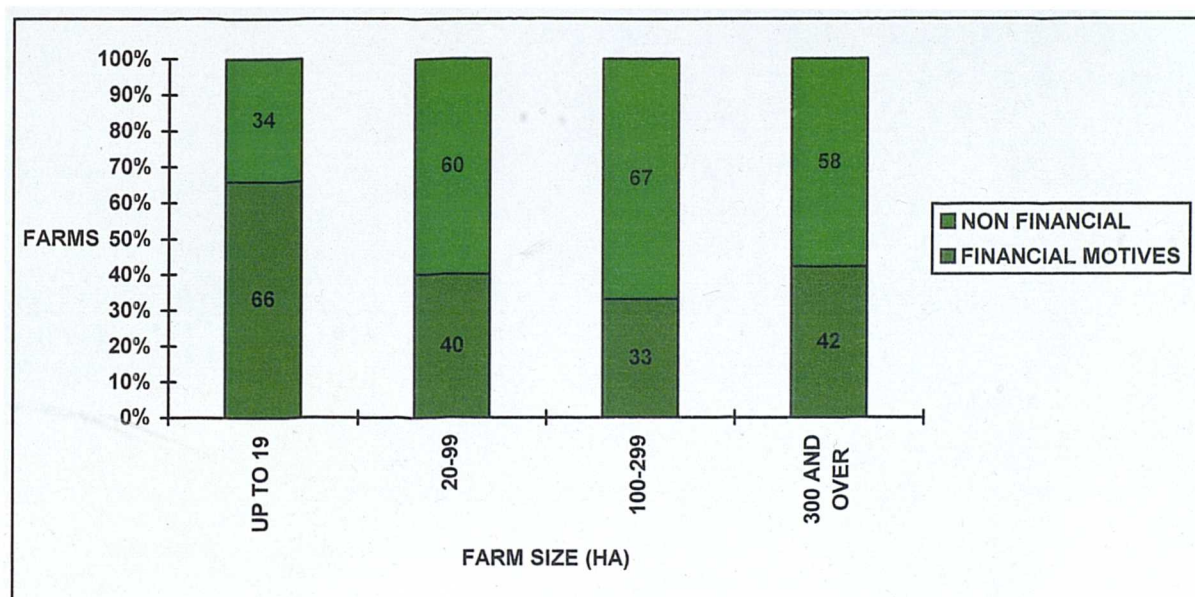


Figure 9.2. Relative degree of farm-level financial motivation for permanent and temporary recreational provision by farm size (Source: Author's survey).

MOTIVATION FARM SIZE (Ha)	MEAN CAPITAL INVESTMENT PER ACTIVITY (£)		NUMBER OF RECREATIONAL ACTIVITIES	
	FINANCIAL	NON-FINANCIAL	FINANCIAL	NON-FINANCIAL
UP TO 19	6,750	1,000	6	1
20-99	3,800	838	5	16
100-299	10,792	378	24	9
300 AND OVER	23,036	667	14	9

Table 9.10. Mean capital investment per activity by farm size and motivation (Source: Author's survey).

MOTIVATION FARM SIZE (Ha)	MEAN LAND USE PER ACTIVITY (Ha)				NUMBER OF RECREATIONAL ACTIVITIES	
	FINANCIAL		NON-FINANCIAL		FINANCIAL	NON-FINANCIAL
	EXCLUSIVE	NON-EXCLUSIVE	EXCLUSIVE	NON-EXCLUSIVE		
UP TO 19	0.8	0.7	0.0	4.0	6	1
20-99	1.0	0.0	1.4	2.8	5	16
100-299	1.6	1.5	0.8	3.4	24	9
300 AND OVER	1.8	0.9	0.8	3.4	14	9

Table 9.11. Mean exclusive and non-exclusive land allocation to recreational activities by farm size and motivation (Source: Author's survey).

MOTIVATION FARM SIZE (Ha)	MEAN TOTAL LABOUR FTE PER ACTIVITY		NUMBER OF RECREATIONAL ACTIVITIES	
	FINANCIAL	NON-FINANCIAL	FINANCIAL	NON-FINANCIAL
UP TO 19	1.3	0.0	6	1
20-99	0.5	0.0	5	16
100-299	0.3	0.0	24	9
300 AND OVER	0.5	0.0	14	9

Table 9.12. Mean total labour commitment (FTEs) to recreational activities by farm size and motivation (excludes negligible commitments - see Chapter 8) (Source: Author's survey).

Although a strong correlation between farm size and the occurrence of recreational activities has been observed before (Bull and Wibberley 1976, Ilbery *et al* 1996), links between individual types of recreation and farm size have rarely been distinguished. It would be anticipated that different types of recreation are more suited to different sized holdings. Certain enterprises, such as 18 hole golf courses and game shooting, require large areas of land which is likely to restrict their development to larger holdings. A detailed breakdown of recreation type and farm size reinforces this notion (Table 9.13). As expected, game shooting and golf courses are strongly associated with larger farm holdings (300 hectares plus) as are open farms and airfields. In contrast, equestrian activities (riding and facilities) and, to a lesser extent, displays of rare breeds or other livestock are more strongly linked with farms under 19 hectares, perhaps reflecting the suitability of these enterprises for holdings with limited land resources. However, certain equestrian activities, for example

headland horse tracks, require a farm of about 200 hectares in size to accommodate a minimum track length of 5 miles.

RECREATION TYPE	% OF RESPONDING FARMS				TOTAL FARMS (N)
	UP TO 19 HECTARES	20-99 HECTARES	100-299 HECTARES	300 HECTARES AND OVER	
Game Shooting.	0	22	49	29	259
Rough Shooting.	2	27	45	26	192
Coarse Fishing.	5	37	35	23	150
Facilities for Riding: Gallops, Cross Country Course.	10	32	32	26	117
Clay Pigeon Shooting / Gun Club.	4	21	49	26	107
Educational Facilities. School Visits, College Visits.	2	31	44	23	107
Horses for Riding / Trekking / Lessons.	18	24	32	26	95
Open Farm.	1	20	43	36	75
Game Fishing.	1	39	33	26	72
Access Agreements.	2	22	38	38	55
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	0	19	47	34	32
Picnic Site.	3	22	50	25	32
Village Sports Pitches.	0	23	32	45	31
Facilities for Models.	3	13	42	42	31
Laid out Farm Trails / Nature Trails / Cycle Trails.	4	25	46	25	28
Catering: Farm Restaurant, Teas, Coffee Shop.	4	26	48	22	27
Nature Reserve / Country Park / Gardens.	0	31	46	23	26
Farm Birthday Parties.	4	22	52	22	23
Adventure Play Area / Children's Play Area.	5	29	38	29	21
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	14	29	38	19	21
Golf Course / Driving Range / Crazy Golf / Pitching.	0	16	21	63	19
War Games / Paintballing	0	38	31	31	13
Museum.	15	15	46	23	13
Other Types.	0	17	33	50	12
Airfield / Gliding / Parachuting	0	22	22	56	9
TOTAL FARMS (N)	143	939	721	290	2099

Table 9.13. The relationship between specific types of permanent recreation and farm size (arranged in descending order of total incidence) (Source: Author's survey).

Nonetheless, it is clear that some farmers felt that the size of their holding inhibited them developing recreation;

"holding too small" (Farm 1523).

It would be wrong to suggest that all recreational activities on large farms are dependent on a large area of land. Indeed, no specific types of recreation are particularly under-represented on larger farms. It is likely to be other attributes of these farms such as capital, flexibility and resources which are more important factors. A large land resource simply

broadens the range of possible recreational options. Smaller farms (up to 19 hectares) appear to be slightly more constrained in terms of the types of recreation which they are able to support. This reinforces the notion that those most in need are often least able to diversify (Ilbery 1988).

A similar pattern is evident with respect to temporary recreation (Table 9.14). Again, it is the larger farms which exhibit the strongest association with temporary recreation. Riding events represent an exception to this general trend. They exhibit a u-shaped distribution and are more strongly associated with both the smallest and largest farms. In the case of the smaller farms, this is likely to reflect the link between hobby farming and/or disengagement from farming and equestrian activities. Larger farms are perhaps more likely to be associated with hunting and larger riding events, such as point to point races, which require larger areas of land. Alternatively, these farms may have been better able to devote land to riding for personal use which has then led to the development of equestrian events.

RECREATION TYPE	% OF RESPONDING FARMS				TOTAL FARMS (N)
	UP TO 19 HECTARES	20-99 HECTARES	100-299 HECTARES	300 HECTARES AND OVER	
Farm Open Days: Demonstrations, Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Farm Shows.	4	5	12	20	189
Organised Groups (Caravan Rallies / Group Camps).	2	3	4	6	72
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs.	4	1	4	5	50
Motor Sport.	0	1	2	5	40
Ploughing Matches.	0	0	2	6	33
Sheep Dog Trials.	0	1	1	2	21
Social Events: BBQ, Barn dances, Charity Events, Fetes, Fireworks.	1	1	1	2	20
Machinery Rallies.	1	1	1	1	15
School Visits, College Visits.	1	0	1	0	13
Concerts / Fairgrounds / Circus.	0	1	1	0	12
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs.	0	0	1	0	5
Historic Battle Re-enactments.	0	0	0	1	4
Other Types.	0	0	0	0	2
TOTAL FARMS (N)	143	939	721	290	2099

Table 9.14. The relationship between specific types of temporary recreation and farm size (arranged in descending order of total incidence) (Source: Author's survey).

(iii). FARM TENURE.

Farm tenure is another farm structural characteristic which exhibits a significant ($\chi^2_2 = 11.4$, $P < 0.01$) association with permanent recreational provision. In this case, there appears to be

relatively little difference between those who own the majority of their holdings and those who are tenants on more than half their holdings. Neither is there any significant difference in the degree of financial motivation expressed in relation to recreational activities occurring on farms of different tenure (Figure 9.3). This picture mirrors that reported by Bull and Wibberley (1976) who found no difference between the provision of recreation on owner-occupied and tenanted holdings. This in itself seems somewhat surprising. Analysis in Chapter 10 highlights the fact that tenancy agreements are a significant factor restricting the development of recreational activities. Part of the explanation for this difference is highlighted by 25 farms. The provision of recreation on these farms was out of their hands and controlled by their landlord as part of their tenancy agreement. They were unable to operate recreational provision, but their landlord used the farm to provide recreation, usually in the form of game shooting. This situation is illustrated in the following example:

On Farm 106 the shooting rights are formally excluded from the tenancy agreement. The landlord lets the shooting rights on a separate tenancy to a shooting tenant who operates all aspects of the shoot on the farm (Farm 106).

Permanent recreational provision was found on over 23% of those farms with an independent manager, over twice the proportion present in the other groups (Table 9.15). A similar pattern is reflected in the mean number of permanent recreational activities on these farms and the proportion of these farms with temporary recreation. It appears that these corporate holdings are responding to business opportunities more readily than their family business counterparts, perhaps because they are less constrained by the unique considerations allied to family farm businesses. Another feature which emerges from comments on the postal questionnaires are share farming agreements. The structure of these agreements appears to inhibit the development of recreational activities. The pattern of farm tenure also exhibits geographical variations (Table 9.16). The high levels of farms with a corporate management structure in both Kent and Hertfordshire again help to explain the high incidences of recreation observed in these counties. This pattern runs counter to the generally held concept that managed agri-businesses are only interested in farming enterprises and that diversification is primarily adopted as an adjustment strategy by family farm businesses (Marsden *et al* 1986a).

Links between tenure and specific types of recreation are less distinct (Table 9.17). However, several interesting patterns do emerge. Most noticeable is the association between shooting, both game and rough, and a corporate management structure that tends to be associated with larger farms. and, as already observed, these are strongly associated

with shooting activities. In addition, it can mean that the farm is used as a recreation resource by the owners. This is illustrated by this comment from Farm 832 in Hertfordshire;

"[the] estate [is] owned by [a] large company [and is] used for corporate entertaining".

TENURE	RESPONDING FARMS			χ^2
	OWN MORE THAN 50% OF THE FARM	RENT MORE THAN 50% OF THE FARM	MANAGE THE FARM FOR A COMPANY OR SOMEONE ELSE	
OPEN TO THE PUBLIC WITHOUT BOOKING (%)	9	7	21	11.1, P<0.01.
AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY (%)	15	14	40	21.4, P<0.01.
ONLY AVAILABLE TO MEMBERS OF PRIVATE CLUBS, GROUPS OR SYNDICATES (%)	19	26	44	21.8, P<0.01.
TOTAL PERMANENT RECREATIONAL ACTIVITIES (%)	33	36	65	15.2, P<0.01.
MEAN NUMBER OF PERMANENT RECREATION CATEGORY-TYPES PER FARM	2.16	2.05	3.56	31.2, P<0.01.
TEMPORARY RECREATIONAL ACTIVITIES (%)	18	18	44	18.4, P<0.01.
TOTAL RESPONDING FARMS (N)	1419	596	52	

Table 9.15. The relationship between recreational provision and farm tenure (Source: Author's survey).

TENURE	% OF RESPONDING FARMS								
	GWYN	DURH	HERTS	HUMB	KENT	GLOU	LEIC	CHES	MEAN
OWN MORE THAN 50%	74	70	61	71	71	69	63	70	69
RENT MORE THAN 50%	25	29	35	27	23	28	35	29	29
MANAGE THE FARM FOR A COMPANY/SOMEONE ELSE	1	1	4	2	6	3	2	1	2

Table 9.16. Tenure of the responding farm businesses (Source: Author's survey).

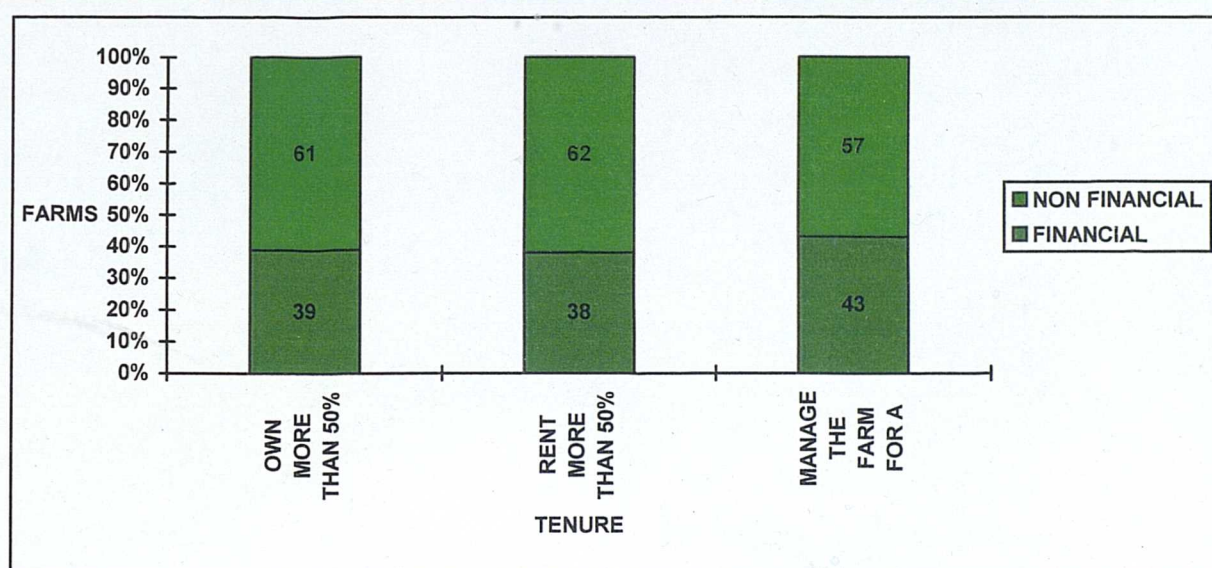


Figure 9.3. Relative degree of farm-level financial motivation for recreational provision by farm tenure. (Source: Author's survey).

RECREATION TYPE	% OF RESPONDING FARMS			TOTAL FARMS (N)
	OWN MORE THAN 50% OF THE FARM	RENT MORE THAN 50% OF THE FARM	MANAGE THE FARM FOR A COMPANY OR SOMEONE ELSE	
TOTAL (N)	1419	596	52	2067
Game Shooting.	53	40	8	258
Rough Shooting.	65	27	8	191
Coarse Fishing.	77	19	5	150
Facilities for Riding: Gallops, Cross Country Course.	68	28	3	117
Clay Pigeon Shooting / Gun Club.	67	24	8	107
Educational Facilities. School Visits, College Visits.	64	28	8	107
Horses for Riding / Trekking / Lessons.	66	32	2	95
Open Farm.	53	32	15	75
Game Fishing.	68	25	7	72
Access Agreements.	64	27	9	55
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	72	19	9	32
Picnic Site.	69	22	9	32
Village Sports Pitches.	61	29	10	31
Facilities for Models.	65	29	6	31
Laid out Farm Trails / Nature Trails / Cycle Trails.	61	25	14	28
Catering: Farm Restaurant, Teas, Coffee Shop.	67	26	7	27
Nature Reserve / Country Park / Gardens.	58	31	12	26
Farm Birthday Parties.	57	30	13	23
Adventure Play Area / Children's Play Area.	71	24	5	21
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	57	33	10	21
Golf Course / Driving Range / Crazy Golf / Pitching.	89	5	5	19
War Games / Paintballing	85	8	8	13
Museum.	77	8	15	13
Other Types.	58	25	17	12
Airfield / Gliding / Parachuting	56	44	0	9

Table 9.17. The relationship between permanent recreational provision and tenure (arranged in descending order of incidence) (Source: Authors' survey).

Game and rough shooting are both suitable for corporate entertaining. A similar but less distinct pattern is also observed in relation to clay pigeon shooting, open farms, educational facilities, laid out farm trails and motor sports. It is unclear why a corporate management structure should predispose farm businesses to develop these types of recreation. Again, it may reflect a greater flexibility to exploit business opportunities on the part of these farm businesses. Links to parent companies and the wider membership of the associated board of directors may be more likely to include an interested party than in a sole proprietorship or partnership. Alternatively, the provision of some types of recreation, such as educational facilities, may reflect a greater willingness amongst these farms to undertake public relations

activities or it may simply be the link with larger farms and recreational provision (all these types are associated with larger farms).

Aside from the distinct patterns relating to corporate management, few others emerge. Golf courses appear to be least likely to occur on farms where more than 50% of the farm is rented. In this case, where wholesale change is required, tenancy restrictions are a fundamental constraint. Coarse fishing is more strongly associated with farms which own more than 50% of their land. Rare breeds and farm livestock are a little more strongly associated with farms which rent more than 50% of their land. This perhaps reflects the flexibility and rotational requirements associated with stock-keeping.

(iv). HOUSEHOLD COMPOSITION.

The provision of recreation exhibits strong associations with household composition, which in turn is linked with succession (see 9.1 (v)). Farms where a single family generation are the only on-farm residents/dependants are associated with low mean numbers of recreational activities, both financially and non-financially motivated (Table 9.18). Two generation farms with young dependants are also associated with low mean numbers of recreational activities;

Mr E farms a 42 hectare dairy farm. Mr E and his wife have two young children and do not have time to provide significant recreational provision, although they host a visit by three classes from the local primary school each year (Farm 680).

The opposite is true of the remainder of the two generation farms and three generation (three resident and dependant generations) farms. In these cases, they exhibit much higher than average numbers of recreational activities, especially in relation to financially motivated provision. These appear to reflect a response to the incorporation of additional generations within the business and the resulting availability of additional labour and increased income pressure on the business.

Such patterns have been observed before in relation to other on-farm diversification activities (see Potter and Lobley 1996), although Evans (1991) discovered a strong association between single resident generations and the provision of bed and breakfast accommodation, primarily because of the availability of surplus rooms in the farm-house. The following case illustrates some aspects of the association between recreational provision and household composition.

1. Case Characteristics.

Mr G, a middle aged farmer operating an 80 ha owner-occupied arable and sheep holding in Gloucestershire, began school visits in 1976 for altruistic reasons. He caters for 1 school visit each year entailing a farm walk, woodland walk, talk and questions involving 240 children from a local school spread over 2 days. A small charge is made. The farm also operates two farm open days, started in 1976, at lambing time, again for initially altruistic motives.

Mr G has incorporated his son and daughter in-law into the family business as equal partners along with himself and his wife. The farm is a relatively small (80 hectare) arable and sheep holding. The farm itself does not provide for an adequate living and return on investment for all six dependants (the son and daughter in-law have two young children). Mr G Junior and his wife are keen to stay on the farm and bring up their children there. There are no immediate opportunities for agricultural expansion and the family do not have sufficient financial resources to support an agricultural expansion. To compensate for this and provide an additional income source the son and daughter in-law have diversified into teas, lunches and cycle hire to provide additional income on this three generation farm which is located in close proximity to a popular National Trust property (Farm 796). In conjunction with this the farm open days have been expanded and are now widely advertised and promoted as events for which a charge is being made. The open days also serve to bring people onto the farm and publicise and use the catering and cycle hire facilities. Although the diversification activities have been initiated largely by Mr G Junior and his wife the income from all the farm business activities is shared between the two families. However, the increase in work on diversification activities by Mr G Junior and his wife has meant an increase in farm work for Mr G and his wife.

2. Interpretation.

The preceding example highlights six key processes:

1. the impact of high land values and capital costs on restricting the expansion of a family farm businesses agricultural operations;
2. the use of recreation as a vehicle to incorporate and support additional generations in expanded family farms;
3. the different ideas and vision which a second generation may bring;
4. the commodification of existing temporary recreation from a 'cultural' activity to a 'diversification' opportunity in response to economic pressure;
5. the impact of changes in farm resource allocations in relation to one activity on other farm enterprises and household members;
6. the importance of the inertia associated with staying on the farm, and the associated quality of life, as a factor influencing the selection of farm business resource allocations.

FARM HOUSEHOLD COMPOSITION		TOTAL FARMS	TOTAL ACTIVITIES	MEAN NUMBER OF ACTIVITIES PER FARM		
				TOTAL	FINANCIAL	NON-FINANCIAL
MANAGER	NON-FAMILY	3	18	6.0	2.9	3.1
SINGLE GENERATION	(A). RECENT SUCCESSOR/NO YOUNG DEPENDANTS.	3	7	2.3	1.3	1.0
	(B). NO ON FARM SUCCESSOR/DEPENDANTS.	2	2	1.0	0	1.0
TWO GENERATION	(A). YOUNG DEPENDANTS.	4	6	1.5	1.0	0.5
	(B). JOINT FARM	4	23	5.8	4.0	1.8
	(C). OLD DEPENDANTS	2	12	6.0	3.8	1.2
THREE GENERATION	THREE DEPENDANT GENERATIONS	2	16	8.0	4.5	3.5
TOTAL		20	84	4.2	2.5	1.7

Table 9.18. Farm household composition and recreational provision. (Source: Author's survey).

Recent changes in farm control do not exhibit a statistical correlation with the provision of recreation (Table 9.19). New entrants or successors do not appear to be any more or less likely to adopt recreational activities which, neither confirms nor rejects some research suggesting that recent entrants and successors are less likely to adopt diversification activities (Ilbery 1991), or that new personnel are likely to implement change (Ward *et al* 1990).

WORKING OR MANAGING THE FARM FOR	TOTAL RESPONDING FARMS (N)	OPEN TO THE PUBLIC WITHOUT BOOKING (%)	AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY (%)	ONLY AVAILABLE TO MEMBERS OF PRIVATE CLUBS, GROUPS OR SYNDICATES (%)	TOTAL PERMANENT RECREATIONAL ACTIVITIES (%)	MEAN NUMBER OF PERMANENT RECREATION CATEGORY-TYPES PER FARM	TEMPORARY RECREATIONAL ACTIVITIES (%)
LESS THAN 5 YEARS	52	2	15	21	29	2.27	15
5 YEARS OR MORE	2009	9	16	22	35	2.19	19
χ^2_2		2.8, (NS)	0.03, (NS)	0.02, (NS)	0.52, (NS)	0.86, (NS)	0.42, (NS)

Table 9.19. The relationship between recreational provision and recent changes in farm control (Source: Author's survey).

(v). SUCCESSION.

The influence of succession status on the adoption or non-adoption of different activities has been widely observed in relation to agricultural and environmental practices (for example

Potter and Lobley 1996) and to a lesser extent in relation to diversification in general (Evans 1992). However, the relationship between succession status and recreational provision has rarely been examined before. A clear pattern emerges from the analysis of recreational provision present on the case study farms (Table 9.20). The presence of an assured successor is associated with the highest mean number of recreational activities per farm. Farms where succession is definitely not going to take place exhibit the lowest mean number of recreational activities per farm. Perhaps most interesting are those farms where succession is identified as being uncertain. These farms also exhibited a much higher mean number of recreational activities per farm. There is little deviation from this pattern when financial and non-financial recreational activities are disaggregated. It appears that farms where succession is assured have either contributed to this status through the provision of recreation, or are stable enough to attempt to expand/diversify the business through recreation and provide non-financially motivated recreational provision too, as in the following two examples;

Mr D operates a 257 hectare arable and horticultural holding in Kent. One of his sons is working on the farm and the process of transferring the holding to him has already begun. Mr D had identified the opportunity to diversify into recreational provision as means of boosting farm income and utilising farm resources in the form of a fishing lake linked with holiday cottages, with the possibility of expanding the agricultural component of the business as a result (Farm 530).

Mr B (Snr), farms a 135 hectare mainly arable and sheep holding along with his only son. The farm already supports a large clay pigeon shooting enterprise but this is in decline. Mr B's son has a strong interest in coarse fishing and this provided the opportunity to diversify the farm and generate additional income to stabilise the business. In the process, this ensured that the business could support both generations. The agricultural business alone would not have been able to do this (Farm 424).

Farms with uncertain succession try to use recreation to consolidate the business to enable succession. Surprisingly, these farms also have quite high levels of non-financially motivated provision. Farms where succession is definitely not going to take place do not appear to have a strong financial motive for recreational provision. They appear more likely to have non-financially motivated provision. For example;

Mr and Mrs S farm a 70 hectare sheep holding in County Durham. They have one daughter, but she has no interest in taking over the farm. The farm is a marginal unit and Mr and Mrs S are approaching retirement age. They have recently sold land and assets to support the business and both undertake part-time employment off the farm. The only recreational activities on the farm are fox hunting, a small game fishing syndicate on 1 mile of river and a game shooting syndicate, all of which have been operating for many years (Farm 106).

SUCCESSION STATUS	TOTAL FARMS	TOTAL ACTIVITIES	MEAN NUMBER OF ACTIVITIES PER FARM		
			TOTAL	FINANCIAL	NON-FINANCIAL
NON-FAMILY	3	19	6.3	4.0	2.3
ASSURED	4	25	6.3	4.3	2.0
UNCERTAIN	3	18	6.0	3.7	2.3
DEFINITELY NOT	3	5	1.6	0.3	1.3
TOO EARLY	7	17	2.4	1.1	1.3
TOTAL	20	84	4.2	2.5	1.7

Table 9.20. Farm succession status and recreational provision. (Source: Author's survey).

9.2. Recreation and Farm Business Adjustment.

This section is concerned with placing recreation in the context of farm business adjustment. This necessarily means that it focuses primarily on the economic component of recreational provision. It is divided into three sub-sections. The first examines the centrality of recreational provision to farm businesses at the time of the postal questionnaire survey. The second focuses on the integration of recreational provision with other on-farm diversification in the form of retailing and/or accommodation. The third sub-section places recreation within the wider concept of farm business adjustment (as discussed in Chapter 3) and generates adjustment profiles for the case study farms.

(i). CENTRALITY OF RECREATION TO THE FARM BUSINESS.

The net income realised from recreational provision has already been examined (Chapter 8), yet, this does not place income in the context of individual farm businesses. It has already been shown that the provision of many recreational activities is not financially motivated but in some cases recreation may provide an important additional income for farm businesses, especially in post-productivist agriculture. Therefore, an analysis of the importance of recreation to the farm business provides an invaluable perspective on recreational activities (See Table 9.21).

Only about one third (31%) of the farms with permanent or temporary recreational activities said they are currently of at least some importance to the continued operation of the farm business (13+18). In contrast, 69% of the farms with some form of permanent or temporary recreation said recreation was of minor importance. This largely reflects the fact that 58% of farms with permanent and temporary recreational provision did not identify a financial motive for their recreational provision, although it does highlight that financially motivated recreational provision does not always make a significant contribution to the farm business. Clearly, there are significant numbers of farms which receive 'pin money' returns from recreation.

RECREATIONAL PROVISION	IMPORTANCE TO THE CONTINUED OPERATION OF THE FARM BUSINESS			
	TOTAL (N)	VERY	SOME	MINOR
OPEN TO THE PUBLIC WITHOUT BOOKING ONLY	35	36	21	42
AVAILABLE BY ARRANGEMENT ONLY	42	9	22	69
CLUBS AND SYNDICATES ONLY	104	6	13	81
TEMPORARY ONLY	45	2	4	94
COMBINATIONS OF PERMANENT	58	11	21	68
PERMANENT AND TEMPORARY	189	18	21	61
TOTAL	473	13	18	69
AVERAGE NUMBER OF PERMANENT AND TEMPORARY TYPES PER FARM	2.7	4.9	3.5	2.1
% RESPONDING FARMS	2099	3	4	16

Table 9.21. The importance of farm-based recreation to the continued operation of farm businesses (Source: Author's survey).

Some interesting interactions become evident if the centrality of recreation is disaggregated (Table 9.21). The proportion of farms where the only recreational provision is open to the public without booking and where recreation is of some importance or very important to the farm business is almost twice the average. Farms with recreation by arrangement show a broadly similar pattern to the average, whereas farms with recreation for clubs and syndicates and temporary recreation exhibit very high proportions of farms where recreation is of minor importance. A distinct difference is noticeable if farms with permanent and temporary recreational activities are compared to the average and those with only temporary recreation. Those with both permanent and temporary recreation are associated with a significantly higher level of importance than the farms with just temporary recreation, suggesting that an active combination of permanent and temporary forms of recreation is being employed, probably where the events are being used to attract people on to the holding.

If the average number of recreational activities per farm is disaggregated by importance, a strong link between multiple enterprises and importance becomes obvious (Table 9.21). Those farms where recreation is very important to the continued operation of the farm business have an average of nearly 5 recreational activities per farm, whereas where recreation is of minor importance they exhibit an average of 2 activities per farm. This pattern of multiple attractions could perhaps be equated with the term 'farm attraction'.

It is also possible to disaggregate the centrality of recreation to farm businesses by study

area (Figure 9.4). This reveals that more farms in the counties of Gwynedd and Leicestershire and less in Gloucestershire and Humberside identify that recreation is very central to the continued operation of their farm businesses. The importance of recreation to farms in Gwynedd is not unexpected, reflecting the marginal upland nature of agricultural production in this area and the suitability of recreational activities as a diversification option. The low level of importance attributed to recreation in Humberside may reflect the dominant arable production system and its post-war profitability.

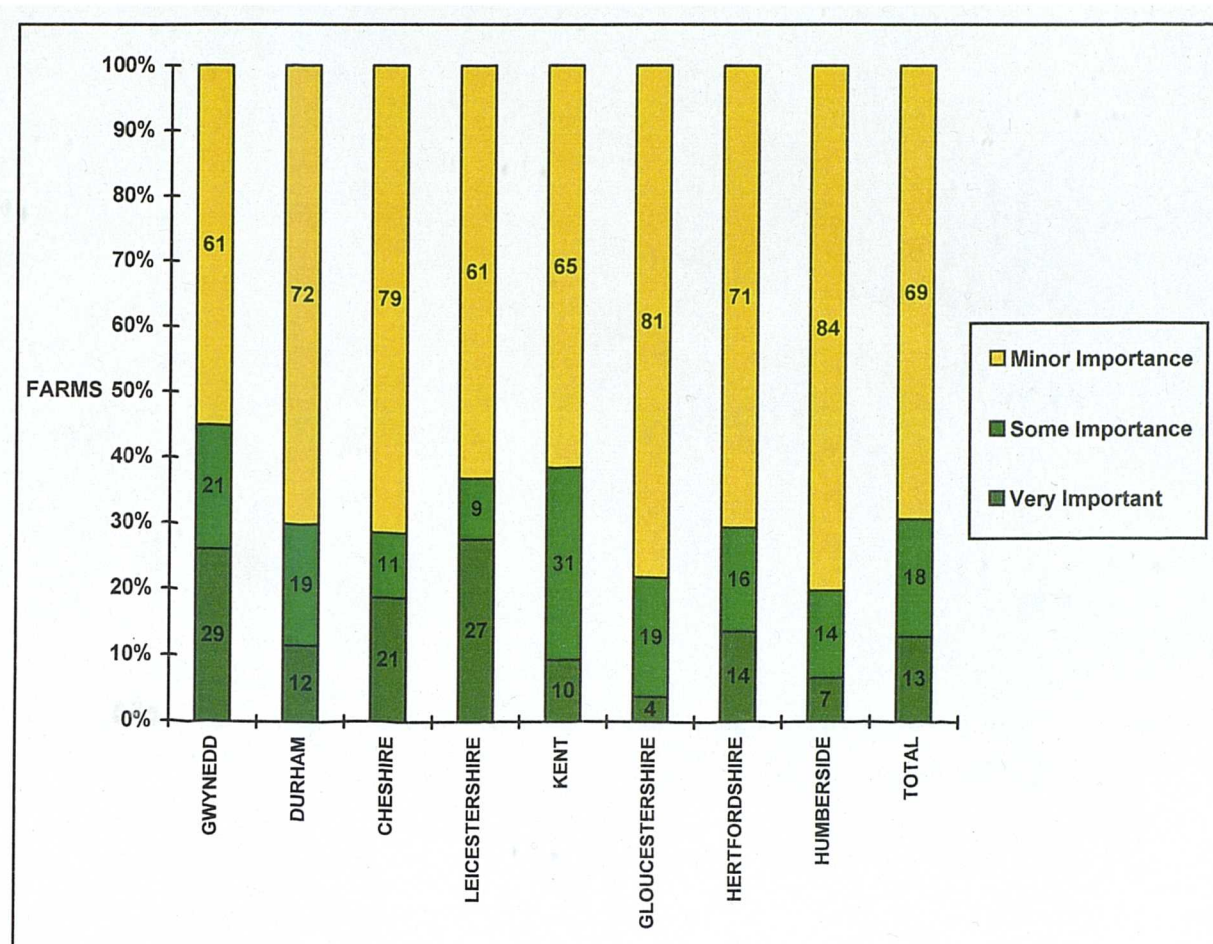


Figure 9.4. The centrality of recreation to the continued operation of farm businesses by study area. (Source: Author's survey).

The initial analysis suggests that, overall, recreational activities are predominantly of minor importance to the continued operation of farm businesses. However, this may conceal significant interactions between importance and specific types of recreation. Table 9.22 illustrates the relative importance of each different type of recreational activity and is arranged in descending order of the total percentage of farms identifying recreational activities as very important or of some importance. Five specific types of recreation - catering, rare breeds, farm birthday parties, laid out farm trails and adventure play areas -

are strongly associated with farms where recreation is either of some importance or very important. In the case of catering, 93% of farms said that recreation is of some importance or very important to the farm business. In contrast, less than 20% of the farms with rough shooting, game shooting and village sports pitches said that recreation is of some importance or is very important to the farm business.

	TOTAL NUMBER OF FARMS	PERCENTAGE OF FARMS EXPRESSING IMPORTANCE			
		VERY	SOME	MINOR	TOTAL 'SOME' OR 'VERY'
Airfield / Gliding / Parachuting.	9	80	20	0	100
Catering: Farm Restaurant, Teas, Coffee Shop.	27	34	61	4	96
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	30	40	54	6	94
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	21	25	65	10	90
Farm Birthday Parties.	22	28	61	11	89
War Games / Paintballing.	13	44	44	11	89
Golf Course / Driving Range / Crazy Golf / Pitching.	16	30	57	14	86
Laid out Farm Trails / Nature Trails / Cycle Trails.	28	29	54	16	84
Adventure Play Area / Children's Play Area.	21	39	45	16	84
Museum.	12	34	50	16	84
Picnic Site.	33	32	48	20	80
Facilities for Models.	30	43	33	25	75
Others.	12	23	44	33	67
Open Farm.	73	25	42	33	67
Clay Pigeon Shooting / Gun Club.	105	34	26	40	60
Horses for Riding / Trekking / Lessons.	90	33	27	41	59
Facilities for Riding: Gallops, Cross Country Course.	111	32	26	42	58
Game Fishing.	70	35	22	43	57
Coarse Fishing.	144	28	26	46	54
Access Agreements.	55	22	30	48	52
Educational Facilities.	106	26	24	50	50
Nature Reserve / Country Park / Gardens.	26	5	41	54	46
Rough Shooting.	189	22	10	68	32
Game Shooting.	256	20	8	71	29
Village Sports Pitches.	31	20	0	80	20

Table 9.22. The relative importance of different types of recreational activity (Source: Author's survey).

Such findings reveal that the majority of farms have more than one recreational activity and this means that it is impossible to ascribe importance, on a farm scale, directly to an individual activity. So for example, although 25% of farms with farm trails said recreation is very important to the business, and a further 46% said it is of some importance, it is not possible to determine the extent to which the trails themselves that are important or if it is other activities which are found on farms with trails or, equally, a combination of activities. The same observation can be applied to activities at the bottom of the table. Here 13% of

farms with rough shooting said recreation is very important to the business, but it is possible that all these farms have other forms of recreation which are very important and that, in fact, the presence of rough shooting is purely incidental. However, it should be remembered that these are relative figures and, therefore, provide a good basis for comparison. Further, although on-farm catering is placed at the top of the table in terms of the proportion of farms expressing importance, this does not take into account the total number of farms with catering.

(ii). THE INTEGRATION OF RECREATION WITH ON-FARM ACCOMMODATION AND/OR RETAILING.

The integration of recreation with accommodation and/or retailing (of non-recreation products or services) on the farm is one specific route with which some farms have engaged. The combination of recreational activities with accommodation on farms as a means of exploiting niche markets was observed by Evans (1990) from an accommodation perspective, whereas the combination of recreational activities with retailing activities has rarely been explored. Overall, 24% of the farms with recreational provision had additional complementary accommodation and/or retailing activities (Table 9.23).

CATEGORY OF PROVISION COMBINATION	RESPONDENTS	COMPLEMENTARY (%)		
	N	ACCOMMO- DATION	RETAILING	TOTAL
OPEN TO THE PUBLIC WITHOUT BOOKING ONLY	29	7	24	31
AVAILABLE BY ARRANGEMENT ONLY	22	5	5	9
CLUBS AND SYNDICATES ONLY	53	6	8	13
COMBINATIONS OF PERMANENT (1+2+3)	32	13	9	22
TOTAL PERMANENT ONLY	136	7	11	18
TEMPORARY ONLY	17	35	6	41
PERSONAL USE ONLY	67	0	4	4
PERMANENT AND TEMPORARY	110	22	24	45
PERMANENT AND PERSONAL	107	8	8	17
TEMPORARY AND PERSONAL	28	14	4	18
PERMANENT AND TEMPORARY AND PERSONAL	80	13	14	26
TOTAL PERMANENT AND TEMPORARY ONLY	263	15	16	31
TOTAL ALL FORMS OF RECREATION	546	12	12	24

Table 9.23. Recreational provision alongside accommodation and retailing activities. (Source: Author's survey).

In total, 12% of the farms with recreation have some form of on-farm accommodation alongside recreational activities (See Table 9.24 for a breakdown). The majority of these appear to involve an informal recreational element, often contact with farm animals, which is

largely co-incidental to, rather than an integrated part of, a farm holiday. Organised events such as caravan rallies and group camps are the second most common link between recreation and accommodation on farms. Once again the precise nature of any recreational component may vary considerably and is difficult to isolate. In both these cases any link is between existing farm systems and accommodation and not facilities established specifically for recreation.

RECREATION TYPE	NUMBER OF FARMS WITH ACCOMMODATION
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	46
Organised Groups (Caravan Rallies and Group Camps).	12
Coarse Fishing.	4
Facilities for Riding: Gallops, Cross Country Course.	3
Game Shooting.	1
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	1
Access Agreements.	1
UNSPECIFIED	17
TOTAL	85

Table 9.24. The incidence of accommodation alongside recreation types on farms (Source: Author's survey).

Less widespread, but arguably more interesting, is that riding facilities and coarse fishing are found on 3 and 4 farms respectively. These represent an active integration of recreation and accommodation in the form of an 'activity holiday' and may be an approach which will undergo significant development in the future, especially given the high levels of incidence already reported for these two recreational activities. The reason why these activities appear to be more suitable for integration with accommodation on farms is that they are the type of activities that can typically occupy a full/major part of a day and are therefore particularly suitable for integration, representing a way of filling the accommodation (Evans 1990). The following two brief examples illustrate the passive and active integration of accommodation and recreation on farm businesses. They highlight the way in which accommodation can occur alongside recreation in an incidental form and as a key part of an integrated accommodation-recreation package.

Mrs M runs a self-catering accommodation business on the 145 hectare family livestock farm in County Durham. The farm also provides facilities for clay pigeon shooting, riding stables with horses available for rides, a 4 mile cross-country course around the farm and a small picnic site. An important part of the advertising for the self-catering accommodation is the 'extra' facilities available (special rates are available for recreation-accommodation packages). Mrs M estimates that over 50% of the self-catering occupancy is connected to the availability of the other activities, particularly the riding.

Indeed, many visitors who do not book activities in advance take up the opportunity at some point during their stay (Farm 173).

Two caravan rallies, each attracting about 100 participants, take place on Mr I's 275 hectare dairy farm in Gloucestershire each year. The rallies are organised by the Camping and Caravanning Club; Mr I is a member. Mr I provides a farm tour for those that are interested and the participants are free to explore the farm and use the farm trail. The events are advertised simply as staying on a working farm (Farm 695).

Retailing activities are present on a similar proportion of farms with recreational activities (12%). They include 2 garden centres, 3 craft shops, 7 PYO ventures, 6 farm shops, 2 farms retailing ice cream/dairy produce, 1 gift shop and 1 car boot sale. In the case of retailing enterprises, it is difficult to gauge the extent to which they are fully integrated or simply complementary or co-incidental activities. Nonetheless, in the following three cases, it is clear that the recreational component is fulfilling a very specific role;

"to encourage people to visit [the] farm shop" (Farm 476);

"[cross country riding] course to attract people to use livery" (Farm 389);

Mr F (Farm 576) had provided a free picnic site, adventure play area and children's farm yard with rare breeds and farm animals to: "promote retail sales [from the] farm shop and garden centre". Mr F attributed a 10% increase in turnover in the farm shop and garden centre to the addition of these facilities which were successfully attracting more people to visit, particularly families with young children, and had broadened the appeal of the business providing more for people to do on the site.

Surprisingly, the most common type of recreational activity found on farms with retailing enterprises is coarse fishing which would not appear especially amenable to integration with retailing. This may be a result primarily of co-incidence rather than active integration, although a complementary effect might well operate, for example where members of the public visiting the farm for recreation might also visit a farm shop or vice-versa. Expressing farms with retailing as a percentage of each type of recreational activity provides a more detailed picture (Table 9.25). Clearly, a high percentage of farms with rare breeds, catering, farm trails, picnic sites, farm birthday parties and museums are associated with retailing enterprises. These visitor intensive activities would appear highly suitable for integration with retailing. However, it should be remembered that in many cases these activities are also strongly associated with one another.

RECREATION TYPE	FARMS (N)	FARMS WITH RETAILING ACTIVITIES (N)	% OF TYPE WITH RETAILING
Rare Breeds, Wildlife Park, Pets' Corner, Farm Animals.	19	15	79
Catering: Farm Restaurant, Teas, Coffee Shop.	26	19	73
Laid out Farm Trails / Nature Trails / Cycle Trails.	24	17	71
Picnic Site.	28	19	68
Adventure Play Area / Children's Play Area.	18	10	56
Farm Birthday Parties.	20	11	55
Museum.	11	6	55
Nature Reserve / Country Park / Gardens.	14	7	50
Other Types.	9	4	44
Golf Course / Driving Range / Crazy Golf / Pitching.	15	5	33
War Games / Paintballing.	12	4	33
Game Shooting.	50	16	32
Open Farm.	57	17	30
Educational Facilities.	71	20	28
Airfield / Gliding / Parachuting.	9	2	22
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4.	28	6	21
Access Agreements.	42	9	21
Coarse Fishing.	104	21	20
Facilities for Models.	26	5	19
Clay Pigeon Shooting / Gun Club.	82	10	12
Game Fishing.	50	6	12
Rough Shooting.	110	12	11
Village Sports Pitches.	18	2	11
Horses for Riding / Trekking / Lessons.	67	6	9
Facilities for Riding: Gallops, Cross Country Course.	81	5	6
TOTAL NUMBER OF FARMS	546	71	13

Table 9.25. The incidence of farms with retailing and different types of recreational activities (Source: Author's survey).

Distinct variations emerge if the provision of complementary activities is disaggregated geographically. The county of Gwynedd exhibits an incidence of complementary activities nearly twice that of any other county (Figure 9.5). The lowest level is observed on farms in Hertfordshire. This seems somewhat surprising given the high incidence of recreation in this county, but may reflect a trend towards specialization in specific non-farming activities rather than their integration, and a lower need to diversify into recreation because of the part-time nature of many farms in the county and the profitability of arable production. The distribution of complementary accommodation broadly mirrors the overall distribution of complementary activities. Accommodation is most strongly associated with recreation on farms in Gwynedd, a traditional holiday destination. The importance of accommodation on farms in this area

was highlighted by Evans (1990) and reflects the greater demand for accommodation and need for additional income sources in this county. The lowest levels of integration between accommodation and recreation are observed in Hertfordshire and Humberside, both historically dominated by profitable arable production. This appears to reflect the fact that the active combination of recreation and accommodation is associated with tourist destinations. In terms of a recreation and retailing relationship, Humberside exhibits the second highest proportion of farms with such a link (20%). This is likely to reflect the co-incident presence of retailing, especially farm shops, and recreation, such as shooting, on arable/horticultural farms in the county.

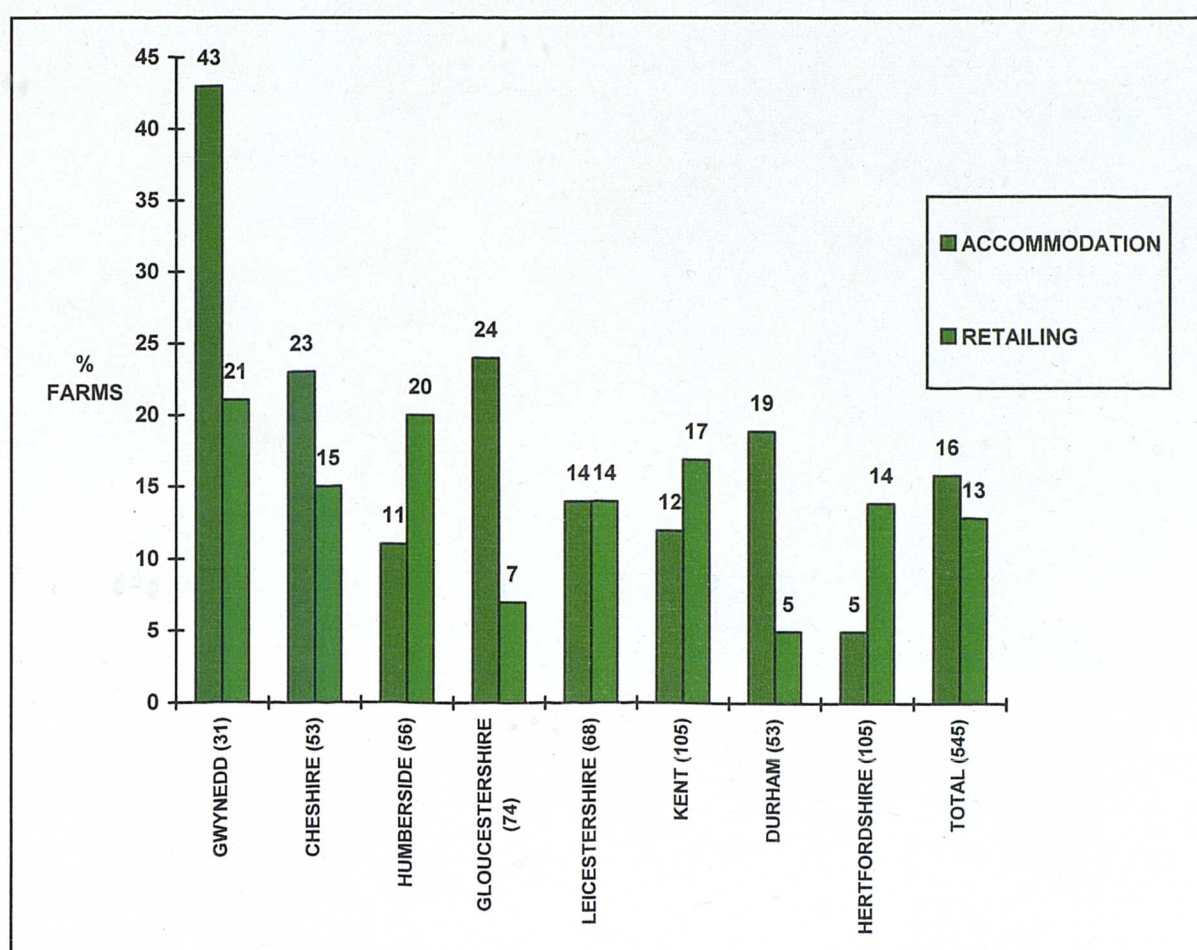


Figure 9.5. Geographical distribution of the occurrence of accommodation and retailing activities alongside recreational provision. (Source: Author's survey).

(iii). FARM ADJUSTMENT PROFILES.

This final sub-section of analysis provides an initial evaluation of recreation within the wider process of farm adjustment. In doing so, it mobilizes contemporary conceptualisations of farm business development pathways which links theoretical ideas with empirical research.

Previous research has tended to focus on single elements of farm adjustment (such as recreation) or amalgamations of elements (such as pluriactivity). There is very little research which attempts to identify combinations of these individual elements (Bowler *et al* 1996). In addition, studies of farm adjustment have almost exclusively concentrated on adjustments involving additional sources of income rather than other adjustments to the overall operation of the business. These may also represent significant elements in the process of farm adjustment (see Munton 1990, Evans and Morris 1997).

The analysis presented in Table 9.26 corresponds to the 20 case study farms. All have some form of recreational provision. However, only 10 identified it as an element of farm adjustment (based on those expressing financial motives). This provides a useful comparison between these two groups. The elements of adjustment identified are not exhaustive but are representative of a wide range of adjustments which the case study farms are employing. The process of translating a variety of scales and timings of farm level adjustments into these profiles is inevitably highly subjective. It reflects the relative importance of these elements in the current farm system and changes over the past decade. It should be remembered that many elements of farm adjustment are incremental and reflect a gradual change over a relatively long period of time and, as such, the profiles reflect broad trends at the farm business level.

Overall, the 20 case study farms had employed/were employing 244 individual adjustments, an average of 12.2 per farm. The most common adjustments employed were changing the balance of agricultural enterprises and increasing re-investment, both identified by 18 out of the 20 case study farms. This is in agreement with Munton (1990) who also found agricultural enterprise change to be the most common form of adjustment amongst farms in Cumbria and Staffordshire (and usually the first). At the opposite end of the spectrum, four possible adjustments are not identified by any of the case study farms.

	FARM	1180	503	530	138	424	173	796	87	576	632	539	856	238	680	695	726	106	568	991	627
ADJUST PRODUCTIVE RESOURCE BASE.																					
Land/Assets.																					
Sell land.																					
Lease out land.																					
Sell assets (e.g. barn conversions/dwellings).																					
Lease out assets (lets/storage/business units).																					
Buy land.																					
Lease in land.																					
Buy assets.																					
Lease in assets.																					
Invest capital/pay off loans etc.																					
Borrow capital/pay off loans etc.																					
Increase hired labour.																					
Decrease hired labour.																					
Increase family labour.																					
Decrease family labour.																					
Increase contract services.																					
Decrease contract services.																					
ADJUST BUSINESS STRUCTURE/ORGANISATION.																					
Partnerships/share farming agreements.																					
Change business financial/accounting structure.																					
Membership of labour/machinery rings/collaborative input purchasing.																					
Collaborative marketing.																					
Farm assurance schemes.																					
ADJUST PRODUCTS OR SERVICES PRODUCED OR PROVIDED ON THE FARM.																					
Agricultural Enterprise Change.																					
Change balance of existing agricultural enterprises.																					
Introduce new conventional agricultural enterprise.																					
Cease existing agricultural enterprise.																					
Increase 'mainstream' food products.																					
Increase extensive food products (e.g. organic).																					
Increase stewardship/environmental products.																					
Production of non-food products, industrial, fibre, bio-mass, lubricants, timber, medicinal.																					
New or speciality agricultural crops/livestock/niche food products.																					
On-farm processing/packing businesses.																					
Retailing services (PYO, farm shops, gift shops, car boot sales).																					
Structural Diversification. Non-agricultural products or services on the farm.																					
Recreation/leisure/educational services.																					
Accommodation services.																					
Other on-farm services (e.g. Boarding kennels).																					
Other farm-based businesses.																					
ECONOMIC CENTRALITY CHANGE (OGA) - INCREASE FARM HOUSEHOLD INCOME FROM OFF-FARM.																					
Employment.																					
Self-employment.																					
Off-farm non-agricultural businesses.																					
Direct retailing (e.g. delivery rounds and farmers markets).																					
Provision of agricultural labour and/or machinery services..																					
ADJUST RE-INVESTMENT/PERSONAL DRAWINGS.																					
Increase re-investment.																					
Increase personal drawings/dividend.																					
Decrease personal drawings/dividend.																					
Decrease re-investment.																					

Table 9.26. Farm business adjustment profiles (Source: Author's survey). ¹Two groups can be identified according to this recreational element. Those using recreation as an adjustment strategy are listed first. 

A comparison of those case study farms with and without recreation as an adjustment (Table 9.27) reveals that certain adjustments appear to be more strongly associated with recreational provision, whereas others are more strongly associated with farms without recreational provision. Overall, farms with adjustment recreation had employed/were employing an average of 13.2 adjustments per farm, whereas farms not employing recreation as an adjustment had employed/were employing an average of 11.2 adjustments per farm. This suggests that farms with recreation as a purposeful adjustment are more dynamic in employing adjustments.

Farms employing recreation as an adjustment appear to be particularly strongly associated with other farm-based visitor facilities, particularly accommodation, but also to a lesser extent retailing services. An increase in hired labour and use of contract services are also associated with recreation, as are changes in business financial and accounting structures. Farms with recreation are also strongly associated with the production of non-food products and an increase in the production of 'mainstream' food products. In contrast, farms without recreation are particularly associated with self-employment and off-farm employment, the provision of agricultural and machinery services to other farms and collaborative input purchasing.

Clear differences emerge between the types of adjustments adopted by these two groups. On the one hand, farms with recreation appear more likely to adopt other on-farm activities and more likely to increase their on-farm agricultural activities. On the other hand, farms not employing recreation as an adjustment appear more likely to have sought alternative income sources off-farm. These businesses are also more likely to have sold land and assets whereas those employing recreation as an adjustment are slightly more likely to have bought or leased in land and other assets. This observation tends to be supported by analysis of the respondents to the postal questionnaire. A correlation exists between permanent recreational provision and recent changes in farm size ($\chi^2_2 = 10$, $P < 0.01$) (Table 9.28) and again significant geographical variations exist amongst the respondents in the pattern of farm size change (Table 9.29). Permanent recreational provision is most strongly linked with dynamic farms, those which have exhibited a change in size in the past five years. The high proportions of dynamic farms (exhibiting a recent increase or decrease in size) in Hertfordshire, Kent and Leicestershire contribute to the higher incidences of recreation observed in these areas. In comparison, Gwynedd and Humberside exhibit the lowest levels of dynamism in relation to farm size and also display lower incidences of recreation.

ADJUSTMENT	TOTAL	WITH RECREATION	WITHOUT RECREATION	DIFFERENCE
Provision of agricultural labour and/or machinery services.	6	1	5	-4
Membership of labour/machinery rings/collaborative input purchasing.	3	0	3	-3
Self-employment.	7	2	5	-3
Employment.	9	3	6	-3
Other on-farm services (e.g. Boarding kennels).	2	0	2	-2
Introduce new conventional agricultural enterprise.	4	1	3	-2
Sell land.	8	3	5	-2
Decrease hired labour.	16	7	9	-2
Sell assets (e.g. barn conversions/dwellings).	3	1	2	-1
Decrease contract services.	3	1	2	-1
Partnerships/share farming agreements.	5	2	3	-1
Direct retailing (e.g. delivery rounds and farmers markets).	2	1	1	0
Increase extensive food products (e.g. organic).	6	3	3	0
Increase stewardship/environmental 'products'.	6	3	3	0
Cease existing agricultural enterprise.	12	6	6	0
Change balance of existing agricultural enterprises.	18	9	9	0
Increase re-investment.	18	9	9	0
Lease out assets (lets/storage/business units).	1	1	0	1
Lease out land.	3	2	1	1
Decrease family labour.	3	2	1	1
On-farm processing/packing businesses.	3	2	1	1
Buy land.	5	3	2	1
Collaborative marketing.	5	3	2	1
Farm assurance schemes.	5	3	2	1
Decrease personal drawings/dividend.	13	7	6	1
Increase personal drawings/dividend.	15	8	7	1
Buy assets.	2	2	0	2
Other farm-based businesses.	2	2	0	2
Borrow capital/pay off loans etc.	4	3	1	2
Increase family labour.	6	4	2	2
Retailing services (PYO, farm shops, gift shops, car boot sales).	6	4	2	2
Lease in land.	8	5	3	2
Decrease re-investment.	12	7	5	2
Increase hired labour.	3	3	0	3
Production of non-food products, industrial, fibre, bio-mass, lubricants, timber, medicinal.	3	3	0	3
Increase contract services.	5	4	1	3
Change business financial/accounting structure.	4	4	0	4
Increase intensive food products.	4	4	0	4
Accommodation services.	4	4	0	4
TOTAL	244	132	112	-

Table 9.27. Comparison of elements of adjustment employed by case study farms, those employing recreation as an adjustment and those without adjustment recreational provision (Source: Author's survey).

It is interesting to note that whilst a statistically significant relationship exists between permanent recreation overall and farm size change, this is not the case specifically in

relation to recreation for private clubs, groups and syndicates. Here, there is no such correlation, suggesting that these activities, unlike other forms of recreational provision, are not associated with dynamic farms. Farms which have reduced their land area may have done so as a way of raising capital or simply as the most efficient allocation of resources in a system where the emphasis is on recreation and, perhaps, other forms of pluriactivity. Farms that have increased their land area may be indicative of more business-orientated farmers exploiting market opportunities and who are more likely to engage with recreational provision. However, it should be remembered that in some cases reductions in farm size were beyond the control of the occupants. For example, in the case Farm 817, it was stressed that the loss of land was due to the expansion of Stanstead Airport. Another variation on this theme is Farm 1213 where 78 hectares had been sold for a golf course development. Here, loss of land is associated with the development of recreation by a third party.

SIZE CHANGE IN THE PAST 5 YEARS	TOTAL RESPONDING FARMS (N)	OPEN TO THE PUBLIC WITHOUT BOOKING (%)	AVAILABLE TO THE PUBLIC BY ARRANGEMENT ONLY (%)	ONLY AVAILABLE TO MEMBERS OF PRIVATE CLUBS, GROUPS OR SYNDICATES (%)	TOTAL PERMANENT RECREATIONAL ACTIVITIES (%)	MEAN NUMBER OF PERMANENT RECREATION CATEGORY-TYPES PER FARM	TEMPORARY RECREATIONAL ACTIVITIES (%)
NO CHANGE	1428	7	13	20	32	2.1	15
INCREASED	496	11	19	25	40	2.4	25
DECREASED	164	16	22	21	43	2.5	22
χ^2		20, P<0.01.	13, P<0.01.	3, (NS).	10, P<0.01.	61, P<0.01.	21, P<0.01.

Table 9.28. The relationship between recreational provision and farm size change (Source: Author's survey).

SIZE CHANGE IN PREVIOUS 5 YEARS	% OF RESPONDING FARMS								
	GWYN	DURH	HERTS	HUMB	KENT	GLOU	LEIC	CHES	MEAN
NO CHANGE	80	73	67	75	60	66	60	70	69
INCREASED	17	18	24	19	29	27	29	25	23
DECREASED	3	9	9	6	11	7	11	5	8

Table 9.29. Size change of the responding farm businesses (Source: Author's survey).

The farm adjustment profiles presented here highlight some of the short-comings of the various farm adjustment strategies and pathways put forward (Marsden *et al* 1986a, Munton 1990 and Bowler 1992a). Specifically, the profiles presented here identify a four fold critique of these approaches, which have not previously been closely inspected. Firstly, there has been an over-emphasis on farm business resource allocation outcomes rather than the underlying processes, which may change without any change in outcome. Such an emphasis would ensure a focus on changes in systems, for example, input purchasing and marketing. Secondly, the notion of strategies implies a carefully thought through process

which has been carefully planned as part of an overall farm business plan. However, evidence presented in Chapter 7 highlights the way in which recreational activities may be a result of impulse switches or evolve gradually, perhaps as a commodification of a non-economic form of recreational provision. Thirdly, the notions of strategies and adjustments are explicitly economically focused and exclude many non-economic resource allocations. An acknowledgement of all the resource allocations of the farm business, including those primarily non-commercial allocations, such as cultural recreational provision and activities such as participation in agri-environment schemes, would permit an understanding of the inter-relationships between these different adjustments. Finally, the lack of a focus on the way in which farm businesses are actively combining these different evolutions and the way in which changes in one area result in co-evolution with other aspects of the farm business represents a significant weakness of existing models.

9.3. Summary.

This chapter has detailed the results and analysis relating to the relationships between farm structural characteristics of farm type, size and tenure and the provision of recreational activities; it has explored the role of recreation in farm business adjustment. The analysis has combined quantitative and qualitative methods and has sought indirect and direct explanations for the provision of recreation. Despite the diversity of different types of recreation, many of these associations have rarely been explored in detail before. It is possible to make eight summarising points.

1. A statistically significant relationship exists between both permanent and temporary recreational provision and farm type. Arable and horticultural types are most compatible with recreational provision and beef, sheep and dairy types least compatible. Standalone intensive pig and poultry farms exhibit particularly low levels of recreational provision. Different types of recreational provision exhibit varying strengths of association with different farm types, for example game shooting is strongly associated with arable farms.
 2. A statistically significant relationship exists between both permanent and temporary recreational provision and farm size. Increasing farm size corresponds to an increasing likelihood of recreational provision. Different types of recreational provision exhibit varying strengths of association with farm size, for example golf courses are strongly associated with larger farms whereas equestrian activities tend to be found on smaller farms. The association between recreation and larger farms is promoted by the process of concentration (leading to fewer larger farms). This highlights the problematic
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application of the concept of recreation as a product of a post-productivist agriculture.

3. There is relatively little difference between owner-occupied holdings and tenanted holdings in terms of recreational provision. In many cases, however, recreational activities on tenanted holdings are controlled by the landlord as part of the tenancy agreement. Holdings with an independent farm manager are far more likely to provide recreation. This pattern runs counter to the generally held notion that managed agri-businesses are only interested in farming enterprises and that diversification is primarily adopted as an adjustment strategy by family farm businesses. Different types of recreational provision exhibit varying strengths of association with farm tenure, although the relationships are less distinct than those observed in relation to farm size and type.
 4. The provision of recreation exhibits strong associations with household composition and succession status. Single generation households and two generation households with young dependants exhibit low mean numbers of recreational activities, whereas other two generation farms and three generation households exhibit much higher numbers of recreational activities. These appear to reflect a response to the incorporation of additional generations within the business and the resulting availability of additional labour and increased income pressures on these businesses. Farms where succession is assured appear to have adopted recreation as a business opportunity whereas farms where succession is definitely not taking place appear to have low levels of recreational provision which are predominantly non-financially motivated.
 5. The relationships between recreational provision and farm characteristics help to explain the geographical pattern of recreation distribution observed in Chapter 5. This is illustrated by the example of sheep dog trials which are, unsurprisingly, strongly associated with farms with sheep production which in turn exhibit a distinct geographical distribution.
 6. The centrality of recreation to farm businesses varies considerably. Just over a third of the farm businesses responding to the postal questionnaire identified that recreation was of at least some importance to the continued operation of their farm business. The centrality of recreation varies considerably according to specific recreation types, which in turn vary considerably geographically.
 7. Recreation exhibits linkages with on-farm accommodation provision and also farm retailing activities, occurring on 16% and 13% of farms with recreation respectively. The extent to which this represents active integration is difficult to ascertain. However, there
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are clear examples of the active integration of both accommodation and retailing with recreation. The occurrence of accommodation alongside recreational activities exhibits a distinct geographical distribution, mirroring the provision of farm-based accommodation facilities. Tourist destinations such as Gwynedd have a very high level of accommodation provision alongside recreation. Areas with a less well established provision of farm accommodation, such as Hertfordshire and Humberside, exhibit much lower levels of accommodation provision alongside recreation. The occurrence of retailing activities alongside recreation is more evenly distributed, although there are strong associations between the provision of certain recreational types, particularly those often found in combination as a 'farm attraction', and retailing.

8. An examination of the multitude of adjustment elements employed by the 20 case study farms highlights the different adjustment elements adopted by different farms. Farms employing recreational provision as an element in the adjustment of their farm business are more strongly associated with specific adjustment elements whereas farms not employing recreation as an adjustment are more strongly associated with other adjustment elements. This suggests a distinct pattern of combinations of adjustment and provides valuable evidence for a critique of the popular conceptualisation of farm adjustment pathways/strategies.

10. REASONS FOR NON-ADOPTION OF RECREATIONAL ACTIVITIES.

This brief chapter focuses on the reasons for non-adoption of recreational provision and is divided into six sections. In the first, an overview of the reasons why farmers had not adopted recreational provision is presented. The subsequent five sections are based on the groups of reasons identified in relation to the development of farm diversification by Ilbery (1991), namely; income, resources, location, personal and other. Each section explores the relationships between the expression of specific reasons, the study area counties and basic farm characteristics respectively. The analysis is based mainly on the responses to the postal questionnaire survey and is, therefore, predominantly quantitative in nature, although unsolicited quotes from the postal questionnaire survey are used to help illustrate key points.

10.1. An Overview of the Reasons for Non-Adoption of Recreational Activities.

The absence of a recreation-specific sampling framework means that the administration of the postal questionnaire survey provides an opportunity to explore both the reasons for adoption and non-adoption of recreational provision. Together, these two perspectives provide a valuable total view of the reasons promoting and inhibiting recreational provision. Such a detailed analysis of recreation non-adopters has rarely been undertaken in any of the contemporary research.

(i). REASONS FOR NON-ADOPTION OF RECREATIONAL ACTIVITIES.

Overall, 1,580 farms identified 5,561 reasons why they had not adopted recreational provision (Figure 10.1 and Table 10.1). This equates to an average of 4 reasons per farm and suggests that in many cases a complex variety of reasons were inhibiting the development of recreational provision. Indeed, 436 (28%) of the farms identified five or more reasons and two farms identified 15 reasons (in excess of the 14 initial options that they were given).

Before proceeding further with the analysis of the reasons for non-adoption of recreational activities, it is important to return to the results which emerged in Chapter 6. This revealed that the respondents identifying reasons for not adopting recreational provision are comprised of two distinct groups: first, there are those respondents who have some form of recreational provision but have still identified reasons for non-adoption; and secondly, there are those respondents with no recreational provision. The way in which farmers construct farm-based recreation as '*diversification recreation*' means that the reasons for non-adoption expressed are likely to reflect this dominant construction and relate to why the respondents have not developed diversification recreation.

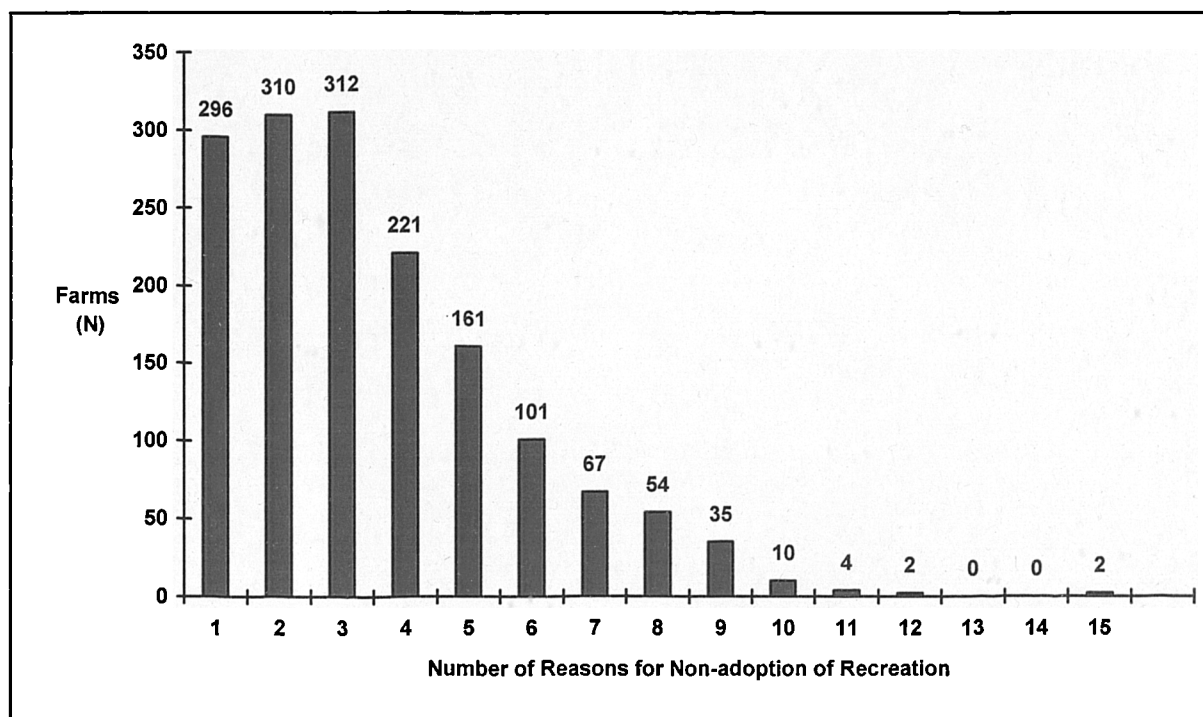


Figure 10.1. The number of reasons for non-adoption of recreation identified by responding farms. (Source: Author's survey).

This notion is reinforced if the responses of these two groups are disaggregated (Table 10.1). Surprisingly, there is little variation between these two groups. Both display a very similar profile of inhibiting reasons. This similarity confirms the notion of two broad types of recreational provision. The results indicate that those respondents with recreation identifying inhibiting reasons are subject to the same sets of constraints to further development of their existing recreational provision as those without any recreation.

(ii). GROUPS OF REASONS.

The reasons identified above can be allocated to one of the five groups identified by Ilbery (1991). The allocation of reasons to a specific group is not always distinct, particularly between resource factors and economic factors. Nonetheless, these broad groups provide a useful indication of the behaviour of the respondents. In the case of those 'other' reasons identified, the majority of these qualified the selection of a specific reason from the list, the remainder are allocated to the 'other' group. The overall behaviour of the respondents in terms of these five groups indicates that reasons from the personal group are most widely expressed; 74% of the farms identifying reasons for non-adoption identified 1 or more from this group (Table 10.2). Locational reasons are the least widely identified (29%). Before moving on to isolate the role of specific reasons, it is appropriate to consider the combination of reasons. It has already been noted (see Table 10.1) that, on average, farms expressed 4

reasons in relation to the non-adoption of recreation. Reasons from a single group are identified by 26% of farms, whereas 40% of the farms identified reasons from 3 or more of the five reason groups. This shows that the development of recreation on farms is generally inhibited by a complex mixture of reasons from different 'groups' rather than reasons from a single group.

REASON FOR NON-ADOPTION.	TOTAL FARMS EXPRESSING REASON (N)	% OF THOSE WITH SOME FORM OF RECREATIONAL PROVISION	% OF THOSE WITH NO RECREATIONAL PROVISION	% OF TOTAL FARMS IDENTIFYING REASONS FOR NON-ADOPTION
You value privacy.	764	48	49	49
You prefer farming and are not interested in diversification.	754	44	51	48
You do not have enough time.	596	41	36	38
No need to diversify.	428	28	27	27
Your tenancy agreement restricts development.	313	20	20	20
You have insufficient labour available.	281	21	16	18
Lack of available capital to invest.	266	18	16	17
You have a lack of experience with recreation.	257	19	14	16
There is a lack of suitable resources on the farm.	245	16	16	16
The farm is in an unsuitable location for visitors (off beaten track).	244	16	15	15
You have had, or think you would have, difficulty obtaining planning permission.	239	18	13	15
You had never really thought about it.	238	12	18	15
You do not think there is enough demand locally (tourists / local population).	238	15	15	15
You do not think it would be profitable enough.	213	19	9	14
The farm is diversified in other ways.	199	16	10	13
You have had, or think you would have, difficulty with other legislation (e.g. health and safety).	105	8	5	7
There is lots of local competition (farm / non-farm).	87	6	5	6
Other Reasons.	75	5	5	5
You have had problems obtaining advice and information.	19	1	1	1
TOTAL FARMS (N)	1580	705	879	
TOTAL REASONS IDENTIFIED (N)	5561	2591	2970	
APPROX. AVERAGE NUMBER OF REASONS IDENTIFIED PER FARM	4	4	3	

Table 10.1. The reasons for non-adoption of recreational activities. (Source: Author's survey).

REASON FOR NON-ADOPTION.	% OF FARMS IDENTIFYING REASONS FOR NON-ADOPTION
Personal.	74
Resources.	53
Economic.	45
Other.	34
Locational.	29

Table 10.2. The groups of reasons for the non-adoption of recreation. (Source: Author's survey).

Geographically (Figure 10.2), the identification of personal factors as inhibiting the development of recreation varies relatively little between study areas, Leicestershire exhibits the highest level (80%), while the remainder are close to the sample average of 74%. Overall, the identification of resources as a reason for non-adoption of recreation also exhibits relatively little variation between the study areas being highest in the upland areas of Gwynedd (56%) and Durham (57%) and Hertfordshire (50%) identified the highest levels and Leicestershire (39%) the lowest, compared to an average for the sample of 45%. The presence of high levels of recreation, and other forms of diversification and off-farm employment opportunities, in Kent and Hertfordshire suggest that farms in these counties have less need to develop additional recreational activities, whereas farms in Leicestershire appear most constrained economically, perhaps reflecting the limited opportunities for diversification in the county and the mixed lowland farming system present. Locational factors are identified by 35% of respondents in Humberside, whereas they appear less significant in Cheshire (23%), Leicestershire (23%), Hertfordshire (23%) and Gloucestershire (22%), compared to the mean (29%). Little variation emerges with respect to other factors which vary by no more than plus or minus 4 percentage points from the sample mean.

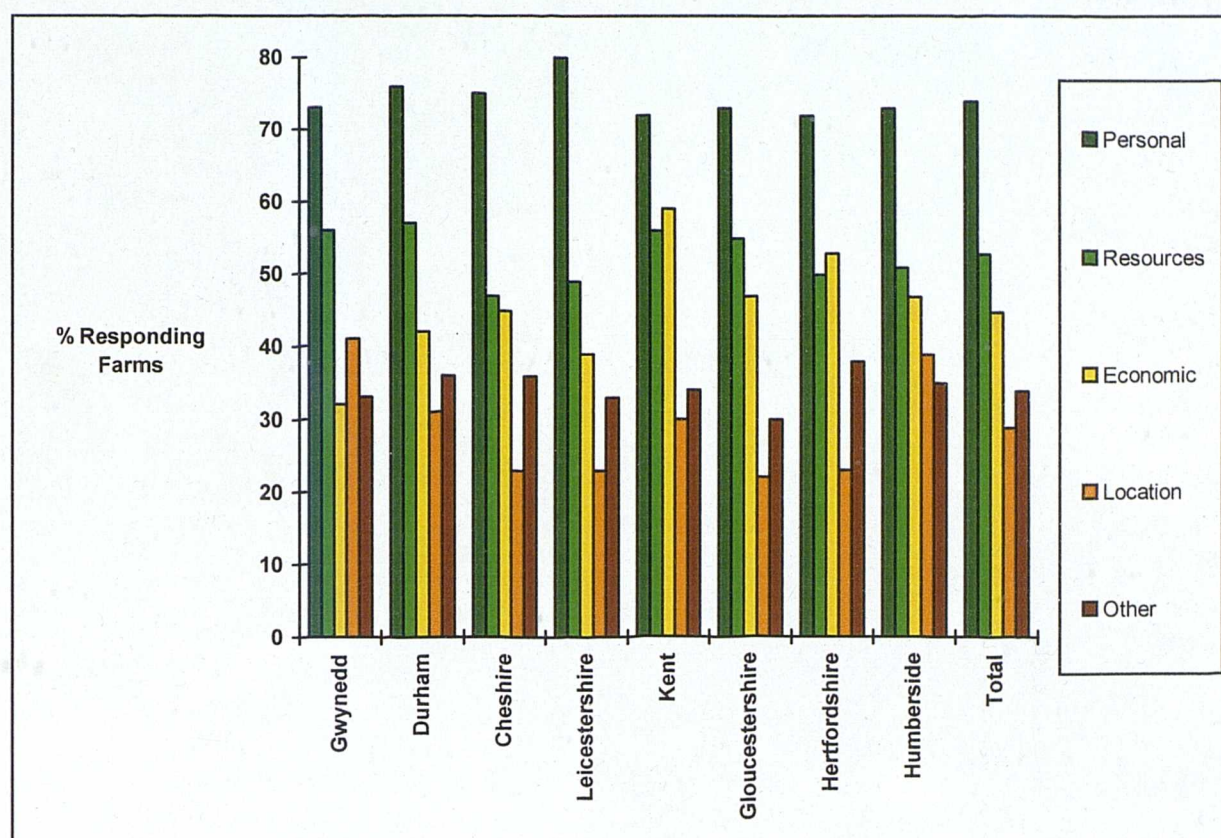


Figure 10.2. The groups of reasons for the non-adoption of recreation. (Source: Author's survey).

10.2. Personal Reasons and the Non-Adoption Of Recreational provision.

(i). AN OVERVIEW OF PERSONAL REASONS.

Two personal reasons dominated the responses (Table 10.3). Many farmers identified a preference for farming and were not interested in diversification (48%), while privacy is identified by 49% of the respondents. These reflect a very significant increase compared to the levels of 7% 'not interested/do not want to' and 3% 'would affect peace and solitude' reported by Bull and Wibberley (1976). Together these two reasons represent strong barriers to diversification into recreational activities, and indeed other on-farm diversification. The strength of these attitudes is reflected by the numerous, often blunt, comments which they attracted. For example:

"not interested in [the] general public" (Farm 1440);
"dislike [the] public" (Farm 1205);
"I don't like people" (Farm 396);
"[I] do not have a showman mentality" (Farm 352);
"this is a working farm not a playground" (Farm 304);
"[I] hate [the] litter and mess that goes with the general public" (Farm 243);
"keep the town boys out" (Farm 1978);

"definitely not thank goodness" (1918);
"[I have] no desire to deal with [the] public" (Farm 105);
"farming is much more important than playing" (Farm 1929);
"this farm is not a pleasure park" (Farm 1204);
"the general public tend to cut fences, open gates and ring the RSPCA
[Royal Society for the Prevention of Cruelty to Animals] for any reason"
(Farm 877).

Alongside the more generally-held traditional attitudes towards farming, it is clear that some farmers hold a strong antipathy towards non-agricultural activities and recreation in particular. The general public also engender strong negative feelings in some quarters. It should be remembered that, in many cases, the farms where these views were expressed did, in fact, have some form of recreational provision, often game shooting, but they clearly did not view it as an unconventional or non-traditional activity. This is in stark contrast to the farmers with recreational provision who identified education and public relations as important reasons for their provision (see Chapter 7) and reveals a continuum of personal attitudes from strongly positive through to strongly negative. In addition to revealing how these farmers construct recreation, these quotes are also very revealing about how these individuals construct themselves as farmers. Other personal reasons are relatively less widely identified. Only 16% of the respondents identified a lack of experience with recreation and 15% had 'never really thought about it [recreation]'. This compares to the 24% who had never thought about it reported by Bull and Wibberley (1976) and appears to reflect an increasing awareness of recreational diversification. A small number of respondents also identified the fact that they were too old or were retiring soon.

The primacy of personal reasons as constraints to the adoption of recreation is reinforced by their apparent lack of geographical difference (Figure 10.3) and is reflected throughout the existing research into other forms of farm diversification (Ilbery 1988, Battershill and Gilg 1997). One variation is that farmers in Kent are more likely to have thought about providing recreation compared to farmers in Durham. Again the differential in demand for recreational provision between lowland Kent and upland Durham is likely to explain this difference. Farmers in Humberside express the greatest lack of experience with recreation and yet they exhibit a high incidence of recreation for personal use. The reverse can be observed in relation to the county of Gwynedd which exhibits both a low level of recreation for personal use and farmers identifying a lack of experience with recreation.

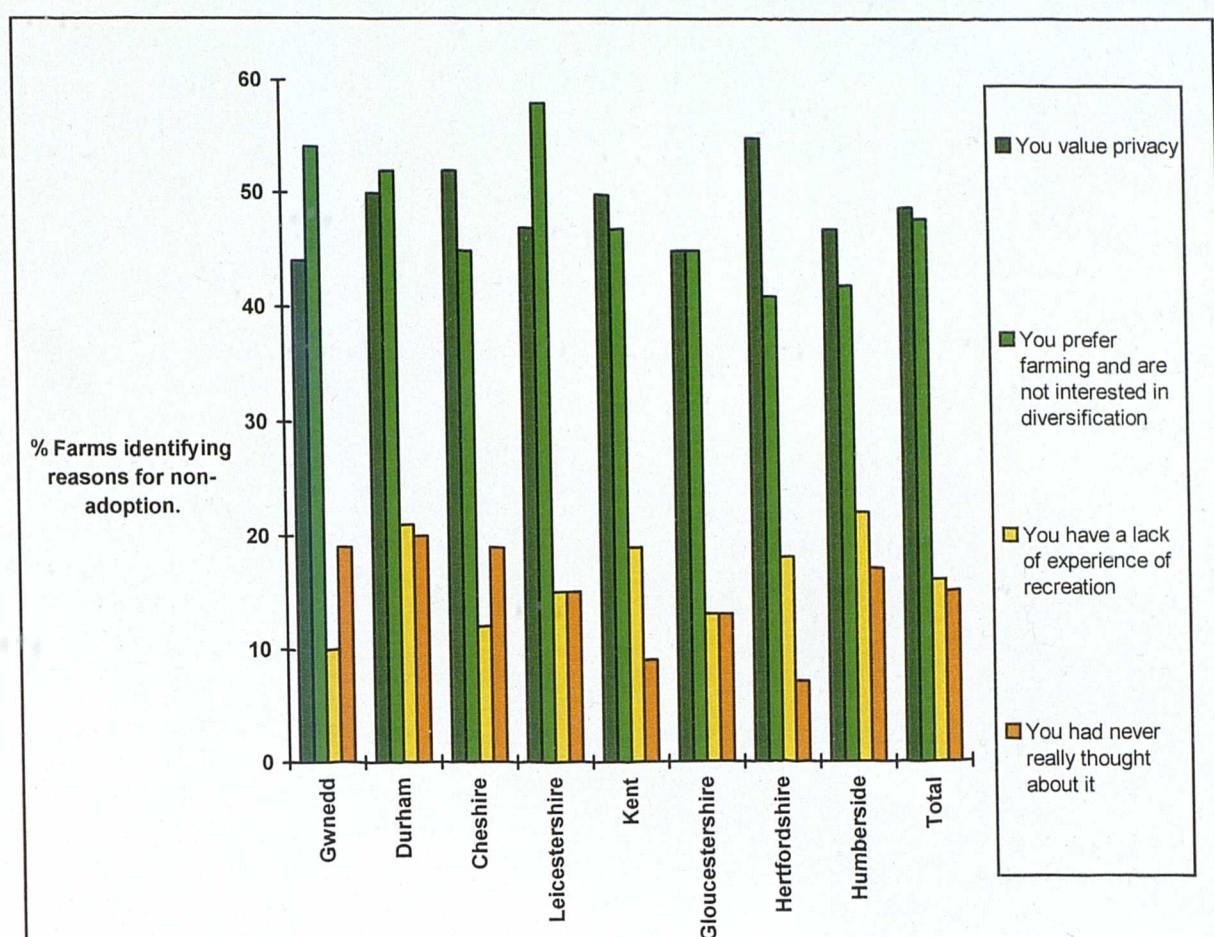


Figure 10.3. The distribution of personal reasons for the non-adoption of recreation. (Source: Author's survey).

(ii). PERSONAL REASONS AND FARM CHARACTERISTICS.

There are few very strong relationships between farm characteristics and the reasons identified for non-development of recreational provision. However, some interesting associations do emerge. Privacy is more frequently expressed by very small farms (up to 19 hectares). In contrast, a lack of experience is slightly more widely expressed by farms in excess of 200 hectares (Table 10.3). Small farms appear more likely to have considered the option of recreational provision, perhaps reflecting the greater income pressures on these farms, whereas larger farms (over 200 hectares) are less likely to have thought about recreational provision. A surprisingly low proportion of farms where farm control had changed within the last five years expressed a preference for farming. This contradicts findings from other research which suggests that new farmers are more likely to concentrate on their farming operations (see Potter 1986 in relation to conservation, Ward *et al* 1990).

	% FARMS IDENTIFYING REASONS FOR NON-ADOPTION			
	You had never really thought about it.	You prefer farming and are not interested in diversification.	You value privacy.	You have a lack of experience with recreation.
Total farms expressing reason (%).	15	48	48	16
FARM SIZE (HA).				
Up to 19.	18	37	56	12
20-199.	18	47	45	16
200-299.	12	52	49	18
300 and over.	10	45	50	17
SIZE CHANGE.				
None.	15	47	48	15
Increased.	15	52	47	18
Decreased.	15	41	45	23
FARM TYPE.				
Arable.	13	47	49	20
Sheep.	16	52	49	16
Beef.	16	54	50	16
Dairy.	19	53	44	15
Horticulture.	12	35	44	17
Pigs/poultry.	13	46	50	15
Other type.	9	40	57	8
No agricultural production.	6	22	61	0
TENURE.				
Own more than 50%.	16	49	52	17
Rent more than 50%.	13	45	40	15
Manage the farm for a company.	8	34	61	15
FARM CONTROL.				
Less than 5 years.	14	26	38	17
5 years or more.	15	48	49	16

Table 10.3. Personal reasons for non-adoption and farm characteristics. (Source: Author's survey).

10.3. Resource Reasons and the Non-Adoption of Recreational provision.

(i). AN OVERVIEW OF RESOURCE REASONS.

The significance of resources as reasons inhibiting the development of recreation has already been observed in Chapter 2. Four individual resource reasons are identified as important reasons for the non-development of recreation by between 16% and 38% of the responding farms (Figure 10.4). A lack of sufficient time is the most widely identified reason (38%), this exhibits a significant jump from the 3% reported in relation to this reason by Bull and Wibberley (1976), and tends to confirm increasing income pressures over the

intervening period. It further reflects the substitution of family labour for hired labour. Values between 16% and 18% are more typical and are expressed in relation to labour, capital, and resources.

There is surprisingly little variation in the resource reasons between the county study areas (Figure 10.4). This strengthens the contention that resources are a very important reason inhibiting the development of recreation and often many farms simply do not have the resources to start up a diversification enterprise.

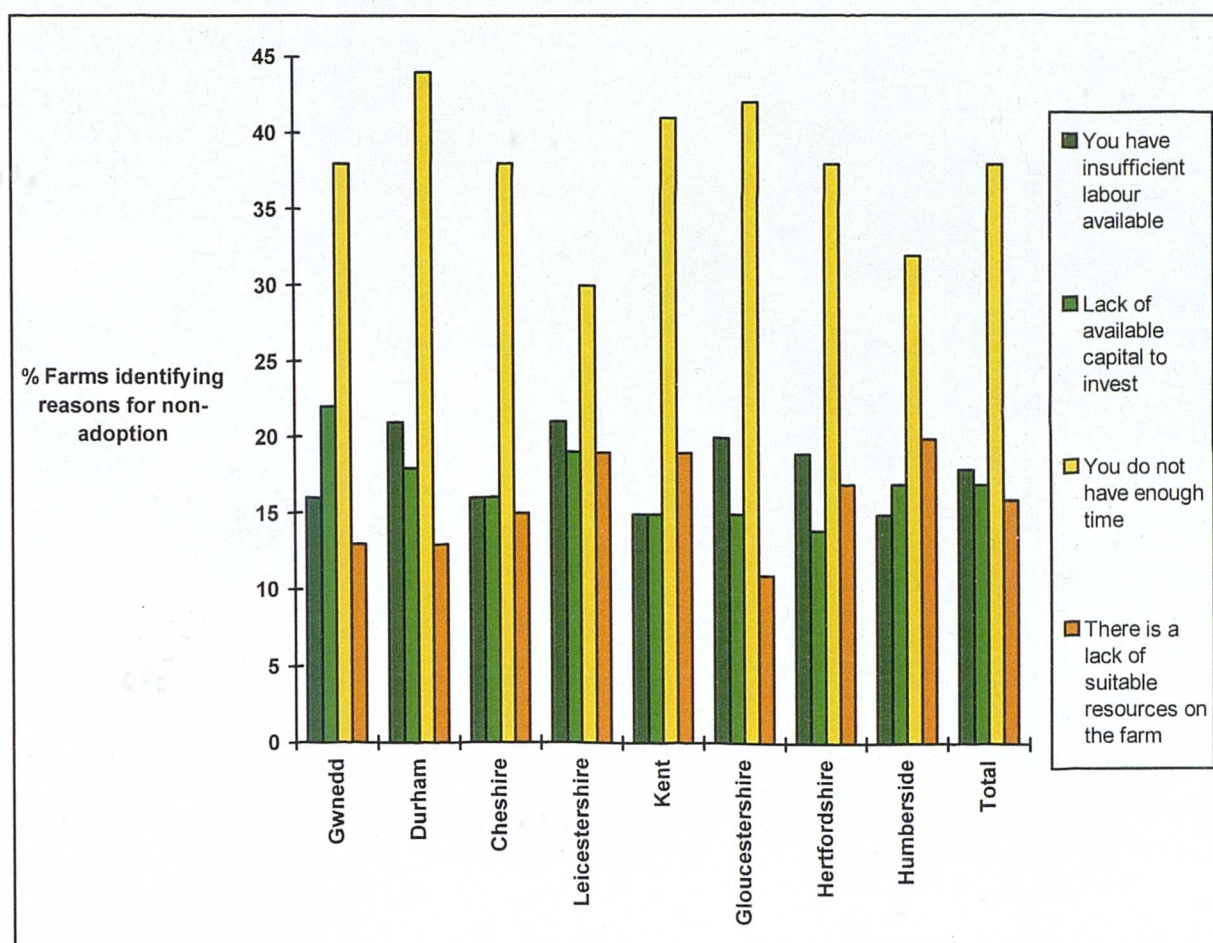


Figure 10.4. The distribution of resource reasons for the non-adoption of recreation. (Source: Author's survey).

(ii). RESOURCE REASONS AND FARM CHARACTERISTICS.

Distinct patterns emerge in relation to farm size and resources (Table 10.4). Insufficient labour is less likely to be a reason for non-adoption of recreation on smaller farms whereas this is identified on a greater than expected proportion of larger farms. This indicates that larger farms are more efficient in their use of labour, a view which is confirmed by Ilbery *et al*

(1998). A lack of capital is strongly associated with smaller farms up to 199 hectares. In contrast, farms over 200 hectares, and particularly those over 300 hectares, are far less likely to identify a lack of capital as a reason for non-adoption of recreation. The pattern in relation to suitable farm resources is distinct, with small farms most constrained by their lack of resources. Indeed, according to Bull and Wibberley (1976), 21% of non-recreation adopting respondents identified the fact that their farms were too small to develop recreation. An increase in farm size corresponds to a clear trend towards an increased availability of suitable resources. This simply reflects that an increase in farm size is directly related to the increased likelihood of more suitable resources existing on the farm. Interestingly, this association between recreation and larger farms is promoted by the process of concentration (leading to fewer larger farms) outlined by Bowler (1986) in relation to the modernisation of primary agricultural production. This runs counter to the concept of recreation as a product of a post-productivist agriculture or indeed, diversification as a member of a set of post-productivist trends reversing established productivist ones, including concentration (Ilbery and Bowler 1998).

	% FARMS IDENTIFYING REASONS FOR NON-ADOPTION			
	You have insufficient labour available.	Lack of available capital to invest.	You do not have enough time.	There is a lack of suitable resources on the farm.
Total farms expressing reason (%).	18	17	38	16
FARM SIZE (HA).				
Up to 19.	17	23	36	23
20-199.	17	19	36	16
200-299.	19	16	39	13
300 and over.	20	9	40	11
SIZE CHANGE.				
None.	17	18	36	16
Increased.	19	12	42	13
Decreased.	20	19	39	23
FARM TYPE.				
Arable.	19	15	38	16
Sheep.	18	19	38	14
Beef.	18	17	41	14
Dairy.	19	16	45	14
Horticulture.	7	11	41	16
Pigs/poultry.	18	22	38	16
Other type.	11	23	26	23
No agricultural production.	6	6	22	0
TENURE.				
Own more than 50%.	17	17	37	15
Rent more than 50%.	18	18	38	17
Manage the farm for a company.	30	4	38	15
FARM CONTROL.				
Less than 5 years.	19	9	35	31
5 years or more.	18	17	38	15

Table 10.4. Resource reasons for non-adoption and farm characteristics. (Source: Author's survey).

On horticultural holdings, a lack of labour is identified by a much lower proportion than the sample as a whole, suggesting that horticultural farms are more likely to have labour available. A slightly higher proportion of dairy farms than expected identified that they did not have enough time, reflecting the work constraints of dairy production. Farms with an independent manager are far more likely to have insufficient labour available, suggesting that these farms operate with minimal labour surpluses, perhaps through the more flexible use of hired labour and contracting than family farms are able to employ. A lack of capital is not identified by as many horticultural holdings as expected, corresponding to the larger business size associated with this mode of production.

10.4. Economic Reasons and the Non-Adoption of Recreational provision.

(i). AN OVERVIEW OF ECONOMIC REASONS.

Economic considerations are clearly a significant reason inhibiting the development of recreation (45% of the farmers identifying inhibiting reasons, Table 10.2). The dominant reason within these is that farms had no need to diversify their income sources (27%). This status is held most strongly by farms in Cheshire, dominated by historically profitable dairying production, and the profitable arable cropping areas of Hertfordshire and Humberside (Figure 10.5). Farms in Gwynedd exhibit the lowest proportion having no need to diversify, perhaps reflecting the marginal nature of much of the upland agriculture in this area and the fact that historically farm incomes in these areas have always been relatively low.

Of more interest are the farmers who thought that recreation would not be profitable enough. This reason is expressed by 14% of the respondents. Of the non-adopters in Bull and Wibberley's (1976) survey, 9% also thought that recreation would not be profitable. However, this disguises a significant difference between those farms with and without recreation. The experience of those farms with some form of recreation appears to be such that a greater proportion (19%) of these farmers do not think recreation would be profitable compared to 9% of the farms which have no recreational provision (Table 10.1). The feeling that recreation, and indeed other forms of diversification, would not generate a sufficient return is encapsulated in the following two comments:

"diversification needs to provide certain returns if it is not to deprive the core business of capital and resources" (Farm 651);
"do what you can well and don't spend time on less productive initiatives" (Farm 787).

Other forms of on-farm diversification are present on 13% of responding farms. These are more strongly associated with those having some form of recreation than respondents with no recreation whatsoever. This perhaps reinforces the notion of a core of farmers who are less likely to engage with any non-agricultural activities. Notably farms in Kent and Hertfordshire exhibit the highest levels of other forms of diversification and farms in Gwynedd and Durham the lowest levels of other diversification.

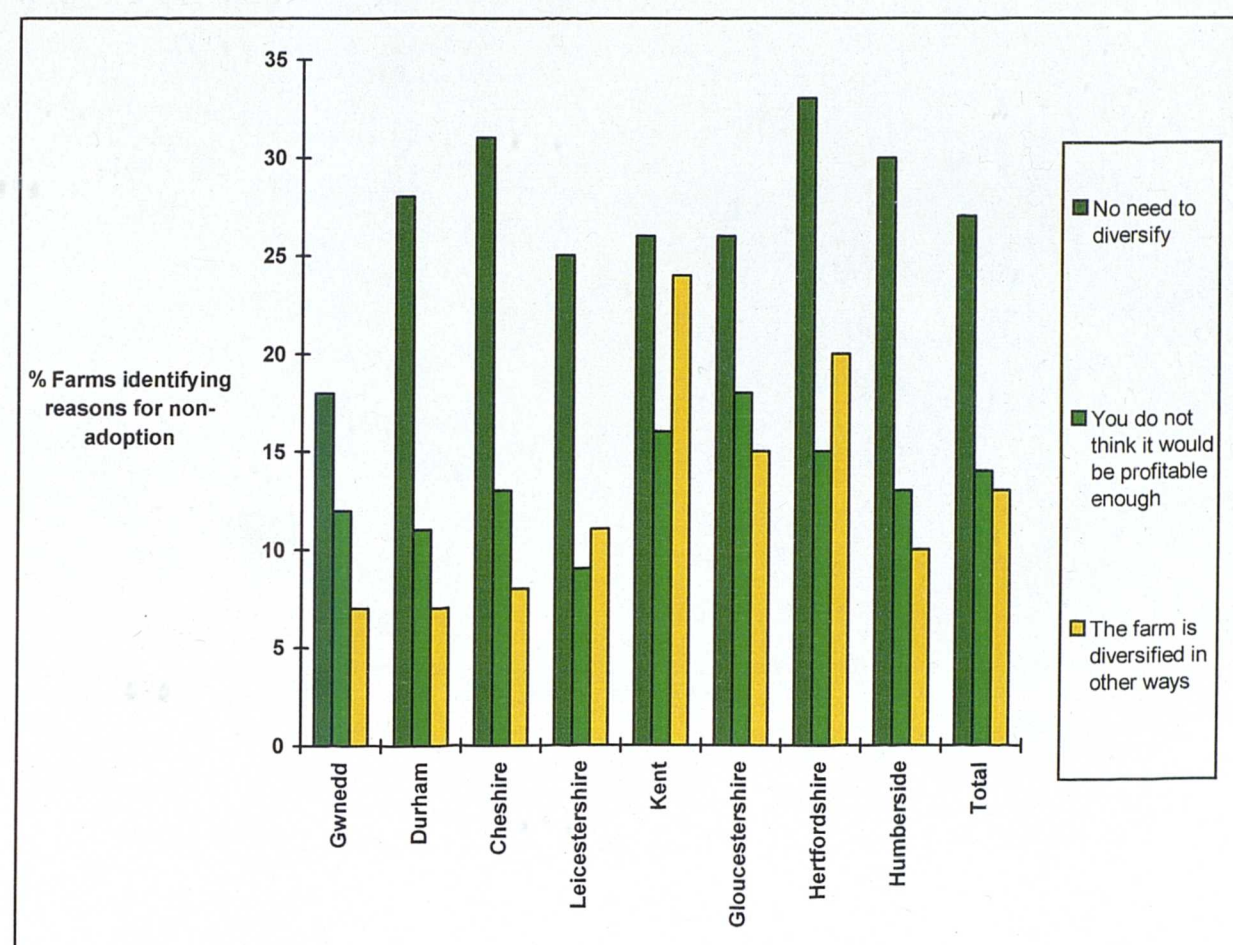


Figure 10.5. The distribution of economic reasons for the non-adoption of recreation. (Source: Author's survey).

(ii). ECONOMIC REASONS AND FARM CHARACTERISTICS.

Several very distinct patterns emerge when the associations between economic reasons and farm characteristics are examined (Table 10.5). In relation to farm size, a greater proportion of the larger farms identified that they had little need to diversify, did not think that it would be profitable enough, or were already diversified in other ways. A lower proportion, than

expected, of the smallest farms identified that they had little need to diversify. Very small, and especially very large, farms are more likely to have diversified in other ways, whereas farms in the middle two bands, and especially in the 20-199 hectare bracket, are less likely to have diversified in other ways. Farms which had increased in size in the last five years are more likely to have little need to diversify or have diversified in other ways. This suggests that there are two distinct groups of non-adopting expanding farms: those expanding with no interest in diversification and those expanding alongside diversification. Again this highlights the unsatisfactory nature of the popular productivist, post-productivist dualism.

	% FARMS IDENTIFYING REASONS FOR NON-ADOPTION		
	No need to diversify.	You do not think it would be profitable enough.	The farm is diversified in other ways.
Total farms expressing reason (%).	27	13	13
FARM SIZE (HA).			
Up to 19.	18	12	14
20-199.	22	11	9
200-299.	34	14	14
300 and over.	34	22	20
SIZE CHANGE.			
None.	26	13	11
Increased.	34	15	17
Decreased.	16	13	14
FARM TYPE.			
Arable.	31	16	15
Sheep.	25	12	10
Beef.	28	12	10
Dairy.	31	13	6
Horticulture.	27	12	34
Pigs/poultry.	30	13	14
Other type.	28	11	20
No agricultural production.	39	11	17
TENURE.			
Own more than 50%.	30	14	12
Rent more than 50%.	22	12	13
Manage the farm for a company.	31	19	8
FARM CONTROL.			
Less than 5 years.	24	17	17
5 years or more.	27	13	12

Table 10.5. Economic reasons for non-adoption and farm characteristics. (Source: Author's survey).

In terms of farm type, a lower proportion of farms with sheep production had no need to diversify, did not think it would be profitable or had already diversified in other ways. Farms with horticultural production are far more likely to be diversified in other ways, whereas farms with dairy production are far less likely to have diversified in other ways. Low levels of

diversification have been observed before on dairy farms and are attributed to the inflexible work practices associated with dairy production (Bateman and Ray 1994). High levels of diversification on horticultural farms reflect the possibilities for farm shops and PYO enterprises associated with horticultural produce.

Noticeably, where there had been a recent change in farm control, these farms are more likely to have diversified in other ways. This suggests that either there is increased income pressure on these farms, that non-recreation diversification is being employed to assist in the successful transfer of the farm, or incoming farmers are bringing new diversification ideas, all processes which have been observed in the literature (Potter and Lobley 1996).

The most significant pattern which emerges in relation to farm tenure is related to those farms with an independent manager. These are far more likely to think that recreation would not be profitable and far less likely to have diversified in other ways indicating that these farms are strongly financially orientated and focused on agricultural production.

10.5. Locational Reasons and the Non-Adoption of Recreational provision.

(i). AN OVERVIEW OF LOCATIONAL REASONS.

Location is identified by 29% of the respondents identifying reasons for non-adoption (Table 10.2). There is virtually no difference between those farms with recreation and those with no recreation. An unsuitable location and a lack of local demand are identified as being the most important locational reasons. A lack of demand is most strongly identified by farmers in Gwynedd, Durham and Humberside reflecting the low population density in these counties (Figure 10.6). In contrast, Hertfordshire exhibited the lowest level of farms identifying a lack of demand, reflecting the very high population density of this county and its proximity to London. ADAS (1994) made similar observations about regional location and visitor numbers in relation to farm attractions. An unsuitable location is most strongly associated with farms in Gwynedd and Humberside. At a micro-scale, an urban fringe location is also seen as an unsuitable location for the development of recreation by some respondents, for example:

*"too urban" (Farm 93);
 "urban vandalism" (Farm 1727);
 "urban fringe, no respect for the countryside, vandalism, stolen cars
 motorbikes, stray horses" (Farm 88).*

Local competition is far less important in the inhibition of the development of recreation, being expressed by only 6% of the farmers, owing in part to the many recreational options available that can fill niche markets.

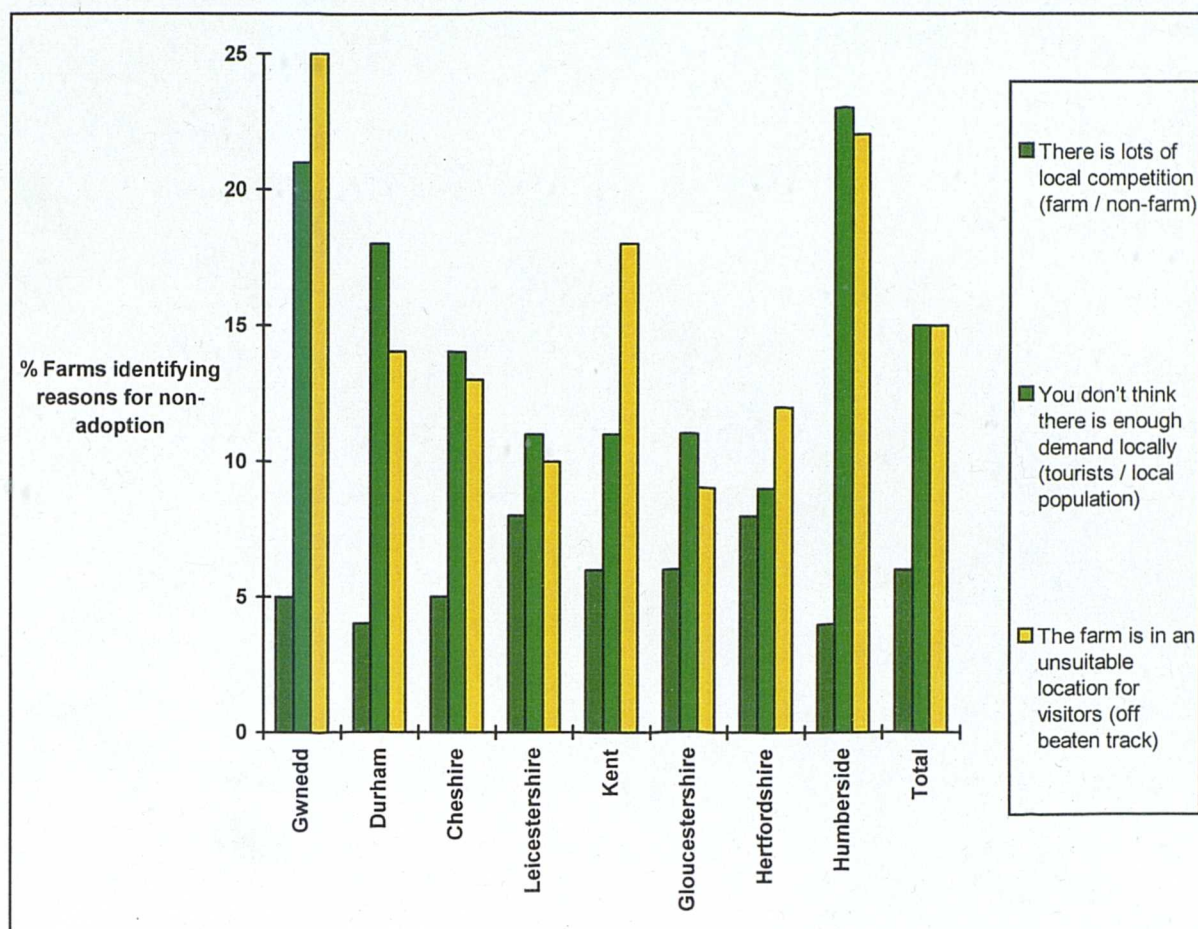


Figure 10.6. The distribution of locational reasons for the non-adoption of recreation. (Source: Author's survey).

(ii). **LOCATIONAL REASONS AND FARM CHARACTERISTICS.**

There are relatively few strong relationships between locational reasons and farm characteristics (Table 10.6). Unsurprisingly, small farms are slightly more likely than larger farms to identify an unsuitable location as a reason for not developing recreation. Fewer than expected arable and dairy farms identify an unsuitable location as a reason for not developing recreation whereas sheep farms are more likely to identify an unsuitable location. This may reflect the lowland and urban fringe locations of many of the former compared with the upland nature of many of the sheep holdings in the sample. Horticulture holdings did not identify a lack of demand as widely as the whole sample. This probably reflects the fact that the majority of these farms are located in Kent where a high demand exists from both tourists and residents (Chapter 4).

In terms of farm tenure and control, a higher than expected proportion of independently managed farms identified the presence of local competition, but are less likely to think that there is insufficient demand in their locality. A similar pattern emerges in relation to farms which had experienced a recent change of control. It may be that these farms are more familiar with the business opportunities and competition in their locations because they are new entrants or managers with business management qualifications.

	% FARMS IDENTIFYING REASONS FOR NON-ADOPTION		
	There is lots of local competition (farm / non-farm).	You do not think there is enough demand locally (tourists / local population).	The farm is in an unsuitable location for visitors (off beaten track).
Total farms expressing reason (%).	6	15	15
FARM SIZE (HA).			
Up to 19.	7	16	19
20-199.	4	14	17
200-299.	6	16	14
300 and over.	6	15	11
SIZE CHANGE.			
None.	4	16	17
Increased.	7	14	14
Decreased.	7	14	15
FARM TYPE.			
Arable.	6	15	14
Sheep.	5	17	18
Beef.	6	16	16
Dairy.	5	15	12
Horticulture.	6	9	17
Pigs/poultry.	4	13	16
Other type.	11	3	23
No agricultural production.	0	22	6
TENURE.			
Own more than 50%.	5	17	16
Rent more than 50%.	6	11	15
Manage the farm for a company.	15	8	8
FARM CONTROL.			
Less than 5 years.	17	9	12
5 years or more.	5	15	16

Table 10.6. Locational reasons for non-adoption and farm characteristics. (Source: Author's survey).

10.6. Other Reasons and the Non-Adoption of Recreational provision.

(i). AN OVERVIEW OF OTHER REASONS.

Other reasons are expressed by 34% of the respondents identifying reasons for non-adoption of recreation (Table 10.2). The largest single reason identified is restrictions imposed by tenancy agreements.

*"problems with landlord - National Trust" (Farm 1520);
 "tenancy agreement splits profits in favour of [the] landlord" (Farm 1512);
 "rented farm, [recreation is] not allowed" (Farm 1207).*

These represent a significant reason in the inhibition of recreation and are expressed by 20% of farms (see also Chapter 9) and have been reported widely as a resistance to diversification (see Ilbery 1989), although Bull and Wibberley (1976) only reported 5% of non recreation adopters identifying tenurial arrangements as a reason for not developing recreation. This probably reflects an increasing emphasis and awareness of diversification over the intervening period.

Direct or perceived problems with planning permission is the other significant reason in this case, accounting for 13% of the farms (Figure 10.7). For example;

*"go-karts very successful but local interference - planning consent revoked
 no point in trying further due to neighbours of urban origin" (Farm 1366);
 "applied for golf course but turned down" (Farm 978);
 "proposed visitor centre abandoned because of irrational planning
 restrictions" (Farm 20).*

Planning problems are particularly important in Gwynedd (Figure 10.7), which has a large area of land under National Park designation, for example;

"in National Park not encouraged" (Farm 1365).

They are also important in Hertfordshire, Kent and Cheshire which all have large development pressures and green belt designations and are reinforced by the pattern of intra-county recreational provision presented in Chapter 5.

*"my only try at diversification was 6 years ago when we were refused
 planning permission for a golf driving range because of green belt, now have
 largest in UK just 4 miles up the road" (Farm 2070).*

Other legislation is also identified by a number of farmers and clearly acted as an inhibitor. For example;

*"insurance difficulties" (Farm 1370);
 "used to have visits from schools but there are too many rules and
 regulations out now for us to continue" (Farm 962).*

More micro-level reasons are identified by some respondents and many of these revolved around conflict with neighbours:

"neighbours" (Farm 457);
"the neighbours wouldn't like it" (Farm 245).

These results echo the findings of the ADAS survey (1994) in relation to farm attractions. They reported that planning problems and problems with other legislation were identified as a major difficulty by farms which had managed successfully to establish an attraction.

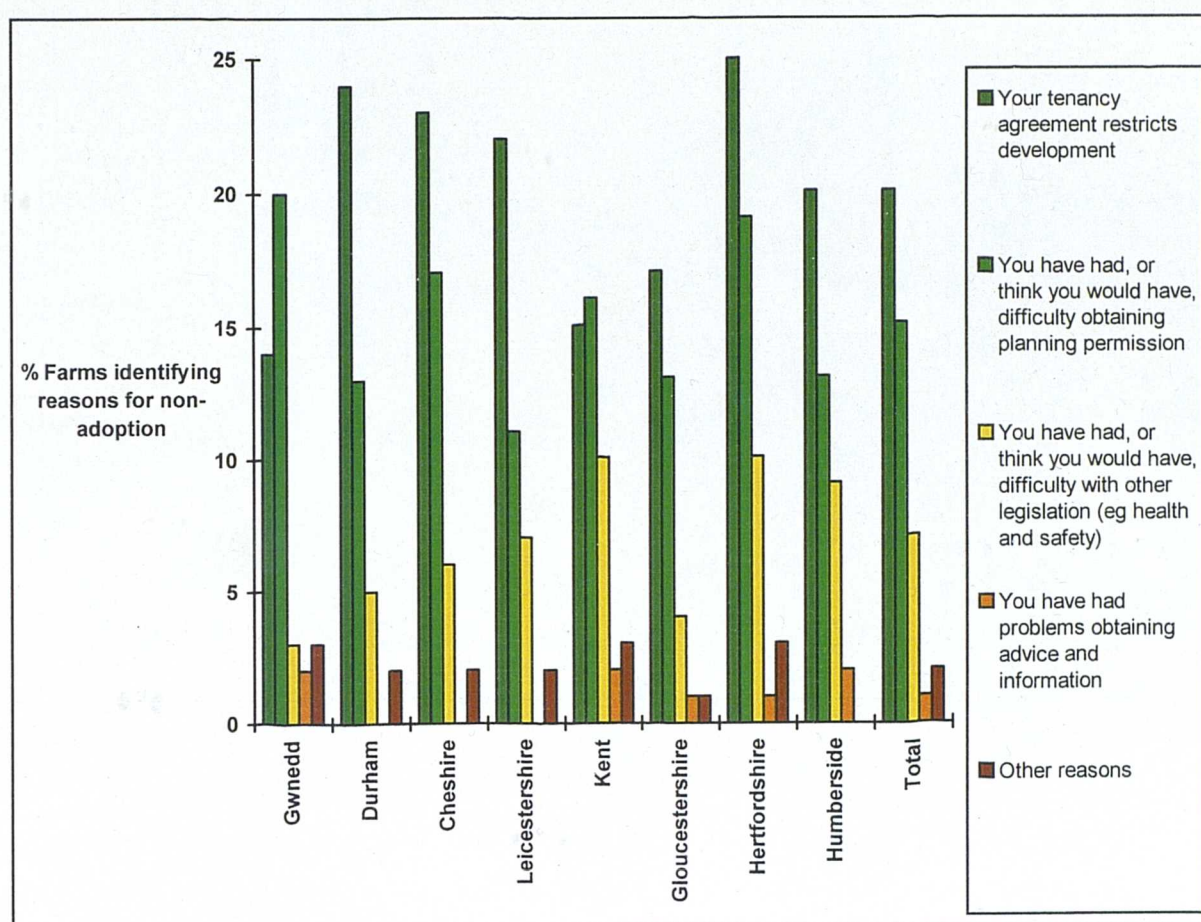


Figure 10.7. The distribution of other reasons for the non-adoption of recreation. (Source: Author's survey).

Indeed, many farmers see the provision of recreation as a threat to their resources. Rather than viewing the provision of recreation as an opportunity to control access to their property and improve security, they view it as the complete opposite. In many cases a double standards view of the general public appears to operate as many of these farms do in fact have some form of recreation. They see a distinction between the people they allow on to their land, especially for traditional activities, and the general public. This is often as a result of direct experience stemming from an urban fringe location, especially for farmers in

Durham, Kent and Hertfordshire. Issues of trespass, vandalism and theft are all reported. These views are highlighted by the following selected comments:

"theft, arson, vandals, burglars, poachers, halfwits" (Farm 146);
"built up area, theft and vandalism" (Farm 1206);
"trespass vandalism theft urban fringe" (Farm 836);
"trespass, vandalism and arson have convinced us that it is a mistake to
allow the general public onto the farm" (Farm 648);
"quite sufficient numbers of people walking all over the place rambler training
planned, would charge and make fortune if could catch them" (Farm 1352).

Such conflict between farmers and the general public, especially in the urban fringe, echo the findings of Deaville (1997) who also reported strong sentiments in relation to public access to farm land and the control of property rights. Indeed, 4% of non recreation adopters in Bull and Wibberley's (1976) study identified fear of damage or conflict as a reason. It is clear that these views are widely held amongst farmers, particularly in relation to free public access to farm land. This conflict represents a bar to the development of recreation, especially in urban fringe locations. Indeed, two farmers identified instances where the provision of recreation had lead directly to these problems:

"open days resulted in burglaries and theft" (Farm 1461);
"developed fishing only to discover the criminal fraternity [sic] also like fishing
but at night without paying" (Farm 592).

(ii). OTHER REASONS AND FARM CHARACTERISTICS.

The two most widely expressed reasons (Table 10.7) do not exhibit major variations with farm characteristics. Unsurprisingly, the restrictions imposed by tenancy agreements are highly associated with farms which rent more than 50% of their land and not widely expressed by farms which own more than 50% of their land. A lower proportion of farms up to 19 hectares in size identified tenancy restrictions as a reason inhibiting their development of recreation, reflecting the fact that these smaller holdings tend to be owner-occupied.

	% FARMS IDENTIFYING PERSONAL REASONS FOR NON-ADOPTION				
	You have had problems obtaining advice and information.	You have had, or think you would have, difficulty obtaining planning permission.	Your tenancy agreement restricts development.	You have had, or think you would have, difficulty with other legislation (e.g. health and safety).	Other Reasons.
Total farms expressing reason (%).	1	15	20	7	2
FARM SIZE (HA).					
Up to 19.	2	20	15	7	2
20-199.	1	15	21	6	1
200-299.	1	14	20	7	2
300 and over.	1	17	19	6	2
SIZE CHANGE.					
None.	1	15	21	6	2
Increased.	1	12	18	7	1
Decreased.	1	31	18	10	6
FARM TYPE.					
Arable.	2	15	22	7	2
Sheep.	1	16	19	4	2
Beef.	1	14	19	6	2
Dairy.	1	12	22	6	1
Horticulture.	3	17	11	10	3
Pigs/poultry.	2	16	18	7	1
Other type.	0	23	6	3	6
No agricultural production.	0	22	11	6	6
TENURE.					
Own more than 50%.	1	17	2	7	2
Rent more than 50%.	1	12	60	7	1
Manage the farm for a company.	0	8	12	0	2
FARM CONTROL.					
Less than 5 years.	2	12	26	0	5
5 years or more.	1	15	20	7	2

Table 10.7. Other reasons for non-adoption and farm characteristics. (Source: Author's survey).

10.7. Summary.

This chapter has detailed the results and analysis relating to the reasons inhibiting the development of recreational activities. The analysis has predominantly been of a quantitative nature and has sought indirect explanations for the non-adoption of recreational activities. It has highlighted variations in the non-adoption of recreational activities between the eight county study areas and by farm characteristics. It has been structured around five main themes.

1. Personal reasons represent the single largest group of reasons and are expressed by 74% of the farms in relation to the non-adoption of recreation. A preference for farming

and privacy are expressed as the key reasons inhibiting the development of recreational activities. The expression of personal reasons exhibit no distinct geographical differences reinforcing their widespread importance.

2. Resources are identified by over 53% of the respondents. A lack of time and suitable resources on the farm appear to be key reasons constraining the development of recreation. The expression of resources exhibits little geographical variation highlighting their widespread importance. However, strong links emerge between resources and farm characteristics, particularly farm size. Small farms are generally most constrained by a lack of resources. Larger farms are least constrained by a lack of land and capital resources, although insufficient labour is apparently more of a constraint for larger farms which appear more efficient in their labour usage.
 3. Economic reasons are expressed by 45% of the responding farms. The most important economic reason inhibiting the provision of recreation is that farms have little need to diversify. This is particularly true in Cheshire, Humberside and Hertfordshire reflecting, in part, the distinct relationships between farm characteristics and economic reasons. In particular a high proportion of larger farms identified little need to diversify or had already diversified in other ways, whereas smaller farms are far more economically constrained. Other forms of diversification are most widespread in Kent and Hertfordshire whereas they are much lower in Gwynedd and Durham.
 4. Locational reasons are expressed by a slightly lower proportion of farms than income reasons (29%). The specific location and level of demand in the locality are both seen as important reasons inhibiting the development of recreation. A lack of demand and an unsuitable location is widely identified in upland Durham and Gwynedd and also in Humberside, reflecting factors such as seasonal demand and lack of proximity to large urban fringes.
 5. Other reasons are expressed by 34% of farms. Tenancy agreements, identified by 20% of farms, are clearly a significant constraint limiting the development of recreation. Direct or perceived problems with planning permission are also seen to be an important factor inhibiting recreation. This is especially evident in Gwynedd, attributed to the Snowdonia National Park designation, and also in Hertfordshire, Kent and Cheshire where significant urban fringe development pressures and green belt designations exist.
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11. Implications and Conclusion.

The previous 6 chapters have presented a detailed and comprehensive analysis of the initiation, operation and evolution of recreational activities, the relationship between recreational activities and the farm business and reasons for the non-adoption of recreational activities. Using the conceptual framework devised in Chapter 3, many important trends have emerged, some of which can be compared with those identified in the limited previous literature on farm-based recreation. Consequently, this concluding chapter is divided into four sections. First, it provides a synthesized overview of the significance of recreational activities generally. Secondly, the applied nature of the topic within agricultural geography permits broad suggestions to be made as to the future trends in farm-based recreation. Thirdly, challenges encountered during the study are highlighted. Finally, these challenges are used to provide direction for future research in an attempt to provide an enhanced understanding of the farm-based recreation phenomenon within the sphere of pluriactivity.

11.1. Farm-based Recreation and Farm Evolution.

A total of 41% of the farms responding to the postal questionnaire survey had some form of permanent or temporary recreational activity. This level of recreational activity is significantly higher than those reported by existing studies which have typically reported levels of 10-15% of farms (Bull and Wibberley 1976, Gasson 1987, Ilbery *et al* 1996). The lack of a functional definition and classification of recreation in these studies, but which has been developed here, means that they have failed to include certain types of activities or categories of recreational provision. In addition, these studies place their emphasis on activities which are of commercial importance to farm businesses when clearly many recreational activities are non-commercial and undertaken for primarily interest, social or altruistic reasons. The provision of non-commercial activities, however, is often linked to the provision of economic recreational activities, and wider farm business commercial activities. The dominance of political economy approaches in agricultural geography recently has contributed to this situation and highlights the need for a more culturally sensitive agricultural geography (see Morris and Evans 1999).

It is possible to disaggregate the incidence of recreation according to categories of provision. This reveals that 31% of the responding farms have some type of recreation for personal use, whereas less than 9% have activities that are available to the public without prior arrangement. The category of recreational events and visits, which had occurred on 18% of farms in the past 12 months is one which has been almost exclusively ignored in previous research, with the notable exception of the DART (1974) study which examined the single

event of farm open days. The extent to which previous studies have elicited information relating to recreation by members of private clubs, groups or syndicates is also unclear. This category of recreation is widespread on many farms (21%).

The total provision of permanent recreational activities on farms is dominated by rough and game shooting, with each occurring on over 9% of the responding farms. Equestrian activities riding and facilities, fishing, both coarse and game, clay pigeon shooting, open farms and educational interests also feature strongly with each occurring on between 3% and 7% of the responding farms. This analysis highlights the occurrence of numerous types of recreation on farms which have not previously been documented. It is a reflection of the recent development of certain more innovative recreational uses of farm resources and reinforces the diversity of niche market opportunities which recreational opportunities present. Recreational activities open to the public encompass a wide range of activities, including those strongly associated with this category of provision, such as rare breeds farms, to those associated with a range of categories, for example coarse fishing. Activities available by arrangement are concentrated amongst relatively few types, principally rough shooting and educational facilities. Recreational activities for clubs and syndicates or groups are concentrated among relatively few types, mainly game shooting, rough shooting and coarse fishing. Temporary recreational provision is comprised mainly of farm open days, organised group visits, riding events, ploughing matches and sheep dog trials.

Multiple recreational activities occur on many farms, a characteristic which has not been identified in the previous research. In terms of categories, the majority of farms (72%) provide permanent recreation in a single category of provision. This is particularly true in relation to recreational provision for clubs and syndicates. The provision of two different categories of permanent recreation is less widespread, yet, temporary recreation is found on 65% of farms with permanent provision. In terms of individual activities, over half of the farms with some form of permanent recreational provision have 2 or more activities and 9% 5 or more. Activities open to the public are often found together, 10% of these farms have 5 or more different types reflecting the active combination of several types as a multi-faceted 'farm attraction'. An association between particular types of recreation and farms with multiple activities also exists, for example picnic sites and rare breeds, reflecting their suitability for integration. Certain temporary types are strongly associated with farms with high numbers of permanent activities, for example historic battle re-enactments, reflecting integration as part of an attraction. In contrast, other permanent types such as village sports pitches, game shooting, access agreements and coarse fishing are associated with low

average numbers of activities on farms and are, therefore, most likely to be found in isolation.

The majority (61%) of the postal questionnaire survey respondents with recreational provision (all forms) appeared to think that the recreational provision of their farms was not the same as the 'farm-based recreation' with which the questionnaire was concerned. They contested the construction of recreation put forward in the questionnaire and completed the section relating to the reasons why they did not provide recreation. The extent to which farmers contest/accept the construction of farm-based recreation varies as a function of combinations of category and type of provision. Constructions are associated with the category of recreational provision provided. Generally, those providing recreational facilities open to the public and recreational facilities available by arrangement had accepted constructions whereas those with recreational activities for clubs and syndicates, personal use and temporary activities had contested constructions. However, this picture is greatly complicated by those farms with multiple categories of provision. Specific types of recreation are also associated with constructions. Many traditional activities feature highly at the contested constructions pole, including game shooting, rough shooting, nature reserve, village sports pitches, educational facilities, game fishing, riding, and coarse fishing. Motor sport, golf courses, war games, adventure play areas, catering, rare breeds, and farm birthday parties are far more widely accepted as constituting 'farm-based recreation'. A similar divide emerges within temporary events with activities such as social events, school visits, and sheep dog trials associated more strongly with contested constructions whereas machinery rallies, motor sport and riding events are more widely accepted as 'farm-based recreation'.

The analysis of motives generates a similar picture, although more detail emerges. Non-financial motives correspond well to those activities associated with 'contested' constructions. Interest motives are the most frequently expressed motives of all at the farm level (47%) but exhibit a much lower level at the activity level (28%). Interest motives are extremely strongly associated with recreational provision for personal use (85% at the farm level). Recreational provision for clubs and syndicates (36%) and temporary recreational provision (29%) are also strongly related to interest motives, reflecting the importance of interest motives in the provision of many 'agri-cultural' activities and farm household participation in many small-scale recreational activities. A link between certain types of recreational provision for personal use and wider recreational provision can also be identified, for example equestrian activities.

At the farm level, financial motives are the second most widely expressed in relation to recreational provision (42%). These encompass a range of degrees of financial motivation through from commercial, disengagement, and dominant business activity, to supplementary and 'pin money' activities. Financial motives are particularly strongly associated with recreational provision which is open to the public and associated types such as catering, rare breeds and farm trails. These correspond to multiple activity 'farm attractions' which often incorporate commodified agricultural activities. Low levels of financial motivation are exhibited by temporary recreational provision, although in some cases there is active integration of temporary and permanent recreation as part of a financially motivated attraction, often involving commodified agricultural events. A second strand of commercial stand-alone activities also emerges dominated by activities such as coarse fishing.

A much lower proportion of farms expressed social motives (18% at the farm level, 29% at the activity level). Social motives are particularly associated with temporary recreation (41%), especially through contact with other farmers at 'agri-cultural' activities such as ploughing matches. Social motives are to a lesser extent associated with provision available by arrangement only (23%) and recreation open to the public (21%) and types such as picnic sites (64%), open farms (46%) and educational visits (48%). At the activity level, there is also a strong link between financial and social motives (25% of activities). This reflects a second aspect relating to social contact with visitors for the provision of some financial activities, particularly of the 'farm attraction' type involving large numbers of visitors, especially in isolated locations such as Gwynedd.

Another strand of distinct activities emerges with altruistic motives. These are expressed by a relatively low proportion of farms (7%), although in relation to a slightly higher proportion of activities (17%). Altruistic motives are particularly associated with recreational facilities available by arrangement (9%), and open to the public (7%). Activities such as farm trails (17%), childrens play areas (17%), educational facilities (17%) and farm birthday parties (15%) are all particularly associated with altruistic motives. These encompass two broad forms; those associated with financial motives and those small scale activities purely motivated by altruistic motives.

The identification of 'other' motives outside the fourfold 'DART' classification highlights problems of employing this classification for recreation (16% at the farm level). Other motives are strongly related to temporary provision (35%) and provision for clubs and

syndicates (32%). They reflect imposition and obligation as a result of tenancy arrangements, activities with a long tradition and activities with tangential benefits. Recreation types such as game and rough shooting and fishing feature strongly, highlighting a further strand of recreational provision associated with a lack of active choice.

Two broad groups of recreation, each with distinctive characteristics, emerge as a result of the analysis of farmers' constructions and motives. These can be referred to as 'diversification recreation' and 'cultural recreation'. Farmers' constructions and motives highlight the significant provision of cultural recreation which has been neglected by contemporary research preoccupied with the economic centrality of pluriactivity and farm diversification. The intention now is to put forward a synthesized review of these two distinct components. However, the divide between the two is necessarily artificial and instead they reflect major clusters along the continuum put forward in Chapter 1.

Geographically, Hertfordshire (47%) and Kent (45%) exhibit the highest incidences of farms with permanent and/or temporary recreation and Gwynedd the lowest (23%). The intra-county distribution of recreational activities highlights several distinct trends. The single most distinct general trend relating to the overall provision of recreational activities is the consistent association between recreational provision and urban fringes. More specifically, recreational activities open to the public without booking exhibit strong concentrations in urban fringes and popular tourist areas such as coasts and upland National Parks. Activities available by arrangement also exhibit a distinct association with urban fringe locations. Recreational activities for clubs and syndicates exhibit a far more even distribution and are well represented in lowland areas, although a slight concentration of these activities in urban fringes is still evident in many areas. Temporary recreational activities also exhibit a correlation with urban fringe locations and a weaker association with tourist areas, particularly in the uplands.

The majority of farms with recreational provision responding to the postal questionnaire survey had initiated some recreational provision before 1980 (52%). This highlights the long-standing commitment to recreation present on many farms, although it must be remembered that initiation here refers to the first activity established, and not to subsequent ones. This is particularly true in relation to recreational provision for clubs and syndicates as 57% had started before 1980, and only 10% of the farms with these activities had initiated them since 1990. 'Cultural' activities such as game shooting (59%), game fishing (58%), rough shooting (57%), village sports pitches (79%), coarse fishing (56%), clay pigeon

shooting (56%), facilities for riding (53%) are all strongly associated with initiation before 1980. In contrast, only 20% of farms with permanent and temporary recreational activities had started since 1990, but this more than doubles to 43% if farms with recreational provision open to the public without booking only are considered. This more recent provision reflects the growth of 'diversification' recreational provision in response to falling agricultural incomes in recent years and is particularly evident in Gwynedd.

Initiating decision-makers of recreational activities were predominantly male (49%), a further 24% were joint decisions and women had taken the initial decision in 16% of the cases. In the remainder of cases, the initial decision-maker was unknown or the decision was out of the control of the business. A downward trend in male decision-makers and a corresponding increase in female and joint decision-making is reported. In the majority of cases, little formal advice had been sought prior to the development of recreation and although this pattern is somewhat reversed in relation to 'diversification' activities, the lack of prior planning in many cases illustrates the inapplicability of search-based models of decision-making to recreational activities (see Bowler 1992a).

Capital investment in recreational activities varies considerably. 'Diversification' types exhibit a mixture of levels of capital investment, including some very high levels often associated with large recreational complexes 'open to the public' usually in tourist areas. Low investments tend to be made in temporary events or involve the use of existing resources. 'Cultural' activities exhibit consistently very low levels of capital investment. The majority of farm businesses had employed overdraft/non-recreation specific sources to finance the development of their recreational activities. Larger 'diversification' investments are more reliant on sources external to the farm business such as, recreation specific loans, and National and European grant programmes. Overall, however, recreational activities depend relatively little on external sources of capital, an assessment which contradicts the subsumption analysis of Whatmore *et al* (1987a) (this may change with the growth of 'diversification' types of recreation in response to income pressures).

The compatibility of some recreational activities, especially many traditional ones, with agricultural production as a non-exclusive land use is unusual in terms of pluriactive types. Indeed, the majority of recreational activities do not involve an exclusive use of large areas of land (although the combination of many activities on the same farm may employ larger land areas). Very low exclusive land commitments are associated with indoor facilities, such as educational activities and catering, whereas larger exclusive commitments correspond to

outdoor activities such as, coarse fishing, motor sport and golf courses. The majority of activities have no non-exclusive land commitment, although a handful have very large non-exclusive land requirements, for example rough and game shooting and temporary activities, such as sheep dog trials and equestrian events.

Recreational activities exhibit a wide range of net incomes, although the majority achieved relatively low returns. Incomes from 'diversification' recreational activities are very variable but typically significantly higher than returns from the 'cultural' activities on the case study farms. The latter generate consistently very low net incomes. It is clear that recreational provision on a farm may not be financially motivated, yet this does not mean that a financial return is always absent. Theoretically, most definitions of pluriactivity encompass these activities and yet this does not appear to be reflected in the incidences of recreation recorded in research. As a result, much of the research has failed to engage with this non-financial component.

A wide range of modes of promotional activities are undertaken. Promotion of 'cultural' activities is dominated by the use of temporary road side signs and many activities provided for clubs and syndicates involve no active promotion by the farm business. In such cases, the club itself undertakes marketing activities (if necessary). Much more intensive advertising is associated with 'diversification' recreational activities, many of which employ commercial adverts, leaflets, marketing group leaflets, and tourist attraction signs. Membership of FAGs appears to be limited to larger 'farm attractions', and marketing via this mechanism has been demonstrated to be far from problem free.

Very few recreational activities are associated with a significant household or hired labour force. Instead, the majority have no or a very negligible household labour commitment to recreation. This holds true for 'diversification' recreational activities, of which very few provide significant household employment. Nevertheless, some 'farm attractions', typically large recreation complexes, are associated with very high levels of hired labour. The majority of 'cultural' activities have no or a negligible labour commitment, reflecting the fact that many are temporary in nature or operated by other groups. Household labour inputs are predominantly male and male day-to-day responsibility tends to be associated with shooting and fishing, other traditional and agricultural activities and also activities such as motor sport. Female responsibility is more strongly associated with educational activities, catering and equestrian activities. This confirms the patriarchal nature of many farm business recreational activities.

The majority of recreational activities are dynamic, exhibiting a range of evolutionary processes. Recreation open to the public is the category of new provision most widely planned, conversely provision open to the public, for clubs and syndicates and temporary events are most likely to have been withdrawn. Some types of recreation show a trend towards an increase in provision (for example golf courses and coarse fishing), whereas others suffer a net decrease in provision (for example, game shooting, ploughing matches and social events). The expansion, contraction and modification of existing recreational provision is also widespread. Activities open to the public are most likely to have expanded. These activities are also highly likely to have been modified in some way reflecting the impact of the 'quality treadmill' on these commercial activities (Evans and Ilbery 1989). In contrast, provision for clubs and syndicates, dominated by 'cultural' types, is most likely to have contracted and been modified. This may reflect the decline in land-based employment and, therefore, people particularly interested in the types of traditional activities which typify this category of provision.

Distinct associations exist between recreational provision, and specific recreational activities, and farm types. Overall, arable and horticultural farm types are most compatible with recreational provision. The association between arable production and recreation is the reverse of previous research which has reported lower levels of diversification on arable holdings. The stronger association between recreational activities and arable production reflects the compatibility between many recreational activities and this mode of production. It also relates to the associations with arable production and larger farm size which permits greater flexibility in adopting certain types of recreation. The strong association between recreational provision and horticultural holdings corresponds, in part, to the presence of buildings and resources, such as irrigation reservoirs, on these holdings. Beef, sheep and dairy types appear least compatible with recreational activities. Low levels of diversification have been observed on dairy farms before and appear to reflect work practices associated with dairy production. In the case of beef and sheep holdings, the lower proportion adopting recreation disguises the fact that these activities are slightly more financially motivated. Livestock farms are particularly suited where the stock form part of the attraction. A slight correlation exists between farms with more than one type, especially in combination with arable production. Farms with other types of production and no agricultural production also exhibit strong associations recreational activities. In the former, the 'other' type often forms part of the recreational attraction. The latter reflects the small average size of these holdings with no agricultural production and their consequent lack of agricultural viability.

Unsurprisingly, there are strong links between certain recreation types and farm types, the obvious examples being ploughing matches and arable farms, and sheep dog trials and farms with sheep enterprises.

Increasing farm size corresponds to an increasing likelihood of recreational provision, with 58% of larger farms (300 hectares plus) providing some form of permanent or temporary recreational provision. They appear more able to allocate land, labour and capital resources to recreational activities, both commercial and non-commercial, without unduly affecting their agricultural activities. The average number of different types of recreation, both permanent and temporary, also increases with increasing farm size. Larger farms are particularly associated with certain 'diversification' types which are land intensive, such as golf courses. The association between recreation and larger farms is promoted by the process of concentration (leading to fewer larger farms), meaning that concentration and diversification are interrelated and co-existing. This brings into question the value of 'post-productivism', and undermines Ilbery and Bowler's (1998) theorization of post-productivism which has progressive reversal of the processes of concentration, intensification and specialization as its central tenet. This further highlights the problematic application of the concept of recreation as a product of a post-productivist agriculture. Recreational provision on smaller farms exhibits a high proportion of financial motivation reflecting insufficient agricultural business size and labour disengagement from agriculture. Activities such as riding, rare breeds and livestock are strongly associated with small farms. The provision of 'cultural' recreational activities is slightly more strongly associated with middle sized farms.

There is relatively little difference between owner-occupied holdings and tenanted holdings in terms of recreational provision, although corporate holdings are far more likely to provide recreational activities, both as a commercial opportunity and as a cultural activity such as farm trails, educational visits and open days. The correlation between agri-businesses and the provision of recreation undermines the generally held post-productivist belief that agri-businesses concentrate on farming and that diversification is the preserve of family farms. The lack of difference between tenanted and owner-occupied holdings is somewhat surprising and contradicts the findings of previous research which suggests that tenancy agreements represent a major limitation to the development of recreation. Indeed, restrictions imposed by tenancy agreements are identified by 20% of the non-adopters as a reason for non-development of recreation. There are two explanations for this; firstly the imposition of recreation by their landlord as part of their tenancy agreement; and secondly, the provision of cultural recreation on these farms.

In terms of the farm household, the provision of recreation exhibits strong associations with both household composition and succession. Single generation households, and two generation households with young children, exhibit low mean numbers of all forms recreational activities whereas other two generation farms and three generation households exhibit much higher numbers of recreational activities. This is primarily 'diversification' recreation as a response to the financial pressures of incorporating additional generations within the business and the availability of labour. The provision of 'cultural' forms of recreation is particularly associated with multiple generation farms reflecting labour availability and individuation, particularly by farm women. Farms where succession is assured appear to have adopted recreation both as a business opportunity and as 'cultural' activities, whereas farms where succession is definitely not taking place appear to have relatively low levels of recreational provision, although they may have cultural types. Those where succession is uncertain exhibit a higher number of 'diversification' recreational activities in an attempt to consolidate the business and assure succession.

The centrality of recreational activities varies considerably. Only 31% of the farms with permanent or temporary recreational activities said they are currently of at least some importance to the continued operation of the farm business (13% very important, 18% of some importance, 69% minor importance). Those with multiple recreational activities ('farm attractions') correlate strongly with those identifying recreation as very important to the farm business. Overall, it is clear that recreation is not likely to be a universal panacea for falling incomes on family farms but can provide some farm businesses with important income.

An examination of farm adjustments highlights the multitude of combinations of resource allocations, and changes in these, which farm businesses employ. The most common adjustments employed by the case study farms involved changing the balance of agricultural enterprises and increasing re-investment, a point noted previously in research (Munton 1990). The case study farms employing recreation as 'diversification' are particularly strongly associated with other farm-based visitor facilities, especially accommodation, but also retailing, increases in hired labour and an increase in use of contracting services. These businesses are also more likely to have changed their business and accounting structures and bought or leased in land. Those without 'diversification' recreation are particularly associated with self-employment and off-farm employment, the provision of agricultural labour and machinery services and collaborative input purchasing. This analysis identifies the problems of attempting to apply models of farm adjustment which characterise

pathways or groups of adjustments in an uncritical way. Specifically, four main criticisms are identified:

- I. strategies and adjustments are explicitly economically focused and consequently many elements of farm business resource allocations, especially non-economic allocations, have not been incorporated into existing models;
- II. farm business resource allocation outcomes rather than the underlying processes have been emphasized. Resource allocation processes may change without any change in outcome;
- III. the notion of strategies implies a carefully thought through process which has been planned as part of an overall farm business plan. However, many recreational activities have been shown to result from impulse switches or evolve gradually;
- IV. a lack of focus on the way in which farm businesses are actively combining these different evolutions and an understanding of the inter-relationships between them.

11.2. The Future of Farm-Based Recreation.

This section considers the future of recreational activities on farm businesses. It puts forward some general observations based on trends drawn from the analysis about the future of recreational activities. It then concentrates on diversification and cultural recreation respectively and speculates about some more detailed scenarios concerning the possible development of these broad types of recreation in upland areas, lowland areas and urban fringes. Of course, it is only possible to present general implications from survey evidence.

A variety of factors favour the continued development of recreational activities on farms. At a farm level, the wide range of possible recreational activities, each with differing requirements in terms of land, labour and capital, mean that the development of recreation represents a suitable option for many farms. The fact that many recreational activities utilise resources which either have little or no value in agricultural production or entail a non-exclusive use of resources, which means that they can take place alongside primary agricultural production, is also a factor in favour of recreation. The widespread tradition and experience of farms already operating recreational activities, albeit on a largely non-commercial basis at present, represents a significant development opportunity. In addition, the existing agricultural activities of farms may represent a recreational opportunity. This process of commodification (as commercial recreation) of existing agricultural activities, and existing non-commercial recreational activities represents a new valuation of them.

External to farm businesses, increasing leisure time and trends in increased participation in countryside pursuits and recreational activities (Clark 1994), including some of the more extreme adventure sports which are particularly suited to farms, are likely to encourage further development of recreational diversification and increasingly move the countryside from a production space to a consumption space. In addition the renewed government policy emphasis on farm and rural diversification through the England and Wales rural development plans (2000-2006) is also likely to promote further development of recreational diversification, through grants for capital development and marketing.

(i). DIVERSIFICATION RECREATION.

On the basis of survey evidence, the provision of commercial 'diversification' recreational activities are likely to increase, largely as a response to changing agricultural policy, the cost-price squeeze in agriculture and the continued amalgamation of farm businesses releasing surplus buildings. However, there are many factors inhibiting the further development of recreational activities. Of particular importance is a preference for farming coupled with a lack of interest in diversification (48%) and privacy (49%). These were widely expressed as reasons for non-adoption of 'diversification' recreation. Interestingly, the identification of these factors exhibited very little geographical variation, reinforcing their importance in any future development of 'diversification' type recreational activity. In relation to the 'diversification' recreational activities, it is possible to surmise five broad avenues of future development.

- I. The commodification of 'cultural' recreation is likely to continue, especially in urban fringe and lowland areas. A continuing development of many activities, such as coarse fishing which is the permanent type most widely planned, is likely to occur. However, the opportunities for this type of activity in the remoter uplands and sparsely populated lowlands are limited, reflecting limited demand. Indeed, 29% of non-adopters identified factors such as an unsuitable location and lack of demand, especially in Gwynedd, Durham and Humberside.
 - II. There will be a continued 'commodification' of agriculture in the form of attractions involving animals and agricultural activities, as for example represented by farm open days. This is likely to be particularly concentrated in urban fringes and to a lesser extent in popular upland areas. However, the development of new recreation is more strongly associated with farms that currently have some form of permanent recreation, especially open to the public. This is especially true in Gwynedd, illustrating the 'quality treadmill'
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effect of competition. An increasing use of temporary activities as marketing gimmicks by established farm attractions has also been observed. The high capital investment required to initiate this type of 'farm attraction', coupled with an already competitive market may limit the growth of this sector primarily to the expansion of existing facilities. Indeed, there is evidence of a rationalisation of some forms of recreational provision and 22% of those that had withdrawn recreational provision had stopped providing recreation open to the public, illustrating the impact of free market forces. Many non-diversification adopters (13%) highlighted direct or perceived problems with planning permission, and this is especially true in National Parks and areas under development pressure, such as green belts.

- III. The development of novel, innovative and niche market forms of commercial recreational provision on farms is likely to continue and there is potential for the development of some of this type of activity in most areas. For example, golf courses feature highly as being planned. However, the development and success of this type of activity is necessarily risky, often capital intensive and heavily dependent on entrepreneurial and business skills.
 - IV. Commercial recreational activities imposed as part of tenancy agreements are likely to continue and possibly expand, especially in remoter upland areas. However, the very nature of these arrangements means that they provide little, if any, benefit to the farm business itself.
 - V. The integration of recreation with accommodation and/or retailing activities on farms is likely to continue, for 24% of farms with permanent and/or temporary provision had either retailing or accommodation alongside recreation. However, the extent of integration is largely passive, despite the predictions of Evans (1990). Recreation and accommodation integration is likely to be important, especially in the popular upland areas, such as Gwynedd, as an extension of the quality treadmill in areas of high accommodation provision. However, increasing conflicts between tourism and conservation may also be important in constraining the further development of recreation in these areas. Elsewhere, especially in the lowlands, the integration of recreation with accommodation is likely to facilitate exploitation of niche markets. A low demand for accommodation in urban fringes is likely to mean that the integration of accommodation and recreation in these areas will not be widespread. The integration of recreation with retailing is especially suitable in urban fringes alongside farm attractions with high visitor numbers, as part of an integrated visitor attraction, and to a lesser extent the lowlands.
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(ii). CULTURAL RECREATION.

The survey evidence presented here suggests that the provision of 'cultural' recreation is set to decline. There are four main reasons for this:

- I. a commodification of some non-commercial activities;
- II. the withdrawal of some non-commercial activities as a result of increasing resource pressures on farm businesses either to operate agricultural enterprises or undertake other on-/off-farm commercial activities;
- III. continuing reductions in the numbers of family farm businesses and a trend towards agri-business, resulting in fewer family individuals and an erosion of traditional skills;
- IV. a reduced cohesion of the farming community as a result of counter-urbanisation and the penetration of middle-class urban values (Champion and Watkins 1991).

The impact of these processes is illustrated by the withdrawal of recreational provision for clubs and syndicates (accounting for 20% of the withdrawn provision). Indeed, only 2% of farms where the only existing recreation is for clubs and syndicates are planning some form of new recreation. A further 18% had withdrawn some form of temporary provision, particularly social events, ploughing matches and group visits. This decline is likely to be most significant in relation to 'agri-cultural' and altruistic activities, particularly in the lowlands and urban fringes, although commodification may represent an opportunity to continue some of these activities, albeit in a slightly different form, especially in some popular upland areas.

11.3. Study Challenges.

During the course of the research six distinct challenges can only partially be overcome.

(i). DEFINITIONS.

Definitions have proved to be the largest study problem, especially the consistent failure to define recreation in the literature. This is comprised of three different elements which vary simultaneously between different studies. The first two are concerned with recreation itself, namely the precise types of activities which are encompassed under the heading recreation, and the financial relationship between the activities and the farm business. The third is the nested structure of the literature within which much of the recreation research is located.

The net result of this confusion is that at different levels in the nested literature different

definitions have been applied. As a result, it is impossible to make accurate comparisons between studies carried out at different levels in the literature. The lack of much recreation specific research and the nested structure of the literature has also necessitated a wider review which has encompassed the literature on pluriactivity. Definitions of recreation within this literature have tended to be implicit (i.e. that element of farm tourism not covered by accommodation) and focused towards the financial end of recreational provision, although the precise activities which this includes and extent of financial contribution has not been specified. The common inference is that all recreational activities fall in to this 'financial' category. This means that much of the contemporary research has failed to define the subset of recreational activities with which it is concerned and simultaneously failed to acknowledge the existence of a significant component of recreation which falls outside its self-limited parameters.

(ii). THE 8 STUDY AREAS.

The use of 8 study areas as a framework for the postal questionnaire sample was fully justified in Chapter 4. It largely reflects the lack of a comprehensive secondary data source of farm-based recreational activities and the need to ensure that the sample reflected a variety of agricultural and demand characteristics, unlike many previous studies of recreation which have tended to be focused on specific areas, such as those strongly associated with tourism.

However, while the use of 8 sampling areas has ensured that a range of agricultural 'supply' and demand factors have been explored and in the process highlighted many subtle differences in the geographical variation of farm-based recreational provision, it has necessitated a somewhat mechanistic analysis. This has, at times, obscured the interpretation of the types of detail which such a detailed analysis might be expected to uncover. Nonetheless, the selection of 8 study areas should not be viewed solely as a negative point.

(iii). FARMERS' CONSTRUCTIONS OF RECREATION.

Despite the use of a qualitative pilot process in the design of the questionnaire survey to try and ensure that the questionnaire would capture the full breadth of recreational activities, this process appears to have been only partially successful. The postal questionnaire succeeded in capturing a breadth and incidence of recreation types in more detail than any previous research. Indeed, the questionnaire appears to have been very successful in this

respect, reporting a significantly higher incidence of recreational provision than recorded in other studies of recreation. This tends to suggest that the questionnaire has identified many recreational activities which previous studies have missed (see 11.3(i)). However, farmers' constructions of recreation, either as a diversification form or a non-diversification form, has meant that many over-rode the questionnaire instructions and completed the section relating to reasons for non-adoption rather than adoption. This tends to confirm the way in which farmers have responded to previous studies of recreation and highlights the confusion between the two forms.

The result of the behaviour of the respondents in relation to the sections of the postal questionnaire relating to reasons for adoption and non-adoption has significantly complicated the analysis of the responses from these sections. Simultaneously, however, it has introduced a new and productive dimension in to the analysis. This has allowed the specific problems associated with studies of recreation to be confirmed with confidence.

(iv). DIVERSITY OF RECREATION 'TYPES' AND FARMS WITH MULTIPLE TYPES.

The wide range of different types of recreation, many with relatively low incidences, has greatly complicated the analysis. The diversity of 'types' means that an analysis of recreation as a phenomenon is necessarily superficial and camouflages significant variations within and between individual 'types'. A second major complication is that unlike many other forms of farm-based activities, recreational activities appear to be particularly associated with multiple provision. Coupled with the inherent diversity of recreation 'types' already mentioned, this has necessitated careful analysis to identify factors relating to specific activities. This occurrence of multiple recreational provision has not been widely observed in previous studies which have adopted simplistic and reductionist classifications.

(v). APPLICATION OF THE CONCEPTUAL FRAMEWORK.

The application of the conceptual framework to the research has been both productive and challenging. It has proved to be flexible and sensitive to a diversity of recreational activities and the farm business forms on which they occur. However, the framework is not without its drawbacks. The integration of quantitative and qualitative research methodologies, a major conceptual aim of the research, has been undertaken throughout the analysis. The methodologies employed are representative of approaches located towards the poles of the qualitative-quantitative continuum. The combination and integration of these methodologies has proved to be a fruitful approach, however, it is not without its problems. The data

generated are vastly different in their structure and format and as a result their integration is not always straightforward and consequently this approach is prone to abrupt changes in the style of analysis.

Methodologically the selection of a relatively small number of ethnographic case studies (20) was guided by the conceptual framework. These case studies have generated a wealth of information which has complemented the extensive postal questionnaire survey. However, the level of engagement and involvement with these cases has necessarily been limited, in part because of the time available. Consequently, in a few cases, especially those involving multiple recreational activities and many individuals the degree of ethnography envisaged in the ethnographic case study methodology was not always possible. Overall, however, the selection of 20 cases has proved a productive balance furnishing both detailed understanding and explanation, and extensive baseline information.

(vi). CULTURAL RECREATION.

The study of the cultural component of recreational activities, which emerge as a strong theme throughout the analysis, is particularly problematic for three reasons:

- I. the nature of many of these activities is often transitional/ephemeral. For example, open days and one-off events, demonstrate that it has been extremely difficult to access and participate directly in these activities in the ethnographic case study phase;
- II. many activities take place with little, if any, involvement with the farm business. For example, game shooting activities imposed through tenancy agreements or small scale activities for clubs and syndicates;
- III. a consequence of farmers' constructions of recreation is that the factors identified as reasons for the non-development of recreation relate primarily to recreation as commercial diversification rather than cultural activities.

11.4. Directions for Future Research.

This study has undertaken a detailed investigation into many characteristics of the initiation, operation and evolution of recreational activities on farms and their interaction with the farm business. It has also considered their interaction with factors external to the farm business throughout. Almost uniquely reasons for non-adoption have been explored. The majority of studies of pluriactivity recommend such research but do not undertake it. As a result of

research conducted in this study, 6 areas for future study seem to emerge.

(i). FACTORS ORIGINATING OUTSIDE THE FARM BUSINESS.

Given the paucity of information on recreational provision, the focus of this study has been on the processes of initiation, operation and evolution of recreational activities at the farm business level and the relationship between recreational activities and the farm business. No direct appraisal of factors originating outside the farm business has been undertaken. Instead, their interaction has been inferred through an examination of the processes of initiation, operation and evolution of recreational activities. Factors originating outside the farm business have not been identified as being of widespread importance. Nonetheless, in some cases, it is clear that factors originating outside the farm business play a crucial role. The review of literature (Chapter 2) has also outlined several policies these external organisations (both public and private in nature) operate relating to farm-based recreation. Similarly, the conceptual framework has highlighted the main types of institutions and organisations currently involved with farm-based recreation. A direct appraisal of these factors would permit a more detailed understanding of their precise role.

It seems likely that these institutions and organisations will increase their involvement with this alternative enterprise in the future, particularly in relation to commercial 'diversification' recreation and will exert an increasing influence on the development of this type of recreation. In order to fully examine factors external to the farm business, detailed monitoring of the actions of institutions in the farm-based recreation sector is necessary. This would aim to discover both how institutions and organisations behave towards recreational activities, and then how the resultant collective responses of individual farm businesses cause evolution of these external behaviours. This is particularly relevant given the renewed policy focus on diversification in the England and Wales rural development plans (2000-2006).

One particular avenue, external to the farm business, which deserves further research attention is that of the role of regional Farm Attractions Groups and the associated National Farm Attractions Network. Such research might represent a highly suitable topic for the application of actor-network theory (Callon 1986, Law 1992) which has been applied elsewhere in rural and agricultural geography (Woods 1998, Evans and Yarwood 2000). This would permit a greater understanding of the role of these groups and the way in which they build networks to maintain a position of influence within them, especially in relation to interactions between individuals within these regional groups. It would also permit inter-regional analysis and comparison between different regional groups and an evaluation of the

role of the national group in the co-ordination of the regional groups and the provision of farm attractions.

(ii). HOLISTIC STUDIES OF FARM BUSINESS EVOLUTION.

Despite the development and application of the pluriactivity concept, there remains considerable scope for holistic studies of farm business evolution. Such an approach would represent a departure from the pluriactivity concept in three distinct ways. First, it would be concerned with processes rather than necessarily manifestations of farm business activity as 'outcomes'. This would ensure an emphasis on changes in production systems, input purchasing and marketing. Secondly, there would be an acknowledgement of all the resource allocations of the farm business, including those non-commercial allocations, such as cultural recreational provision and activities such as participation in agri-environment schemes which have not been included within the pluriactivity concept. Thirdly, there would be a focus on the way in which farm businesses are actively combining these different evolutions, and the way in which changes in one area result in co-evolution with other aspects of the farm business. This would permit an examination of the relationship between economic and non-economic resource allocations and permit the relationships between these to be understood in more detail. The application of a postmodern informed approach to agriculture is viewed as relevant in helping to meet these research objectives. Indeed, such research would contribute to the development of this undoubtedly valuable perspective.

(iii). CHANGE OVER TIME.

An exploration of change in recreational activities over time has been attempted here as far as possible, drawing on DART (1974) and Bull and Wibberley (1976), but inconsistent definitions have constrained comparison. Attention to definition means that it may be possible to repeat the type of postal questionnaire survey undertaken here, at some time in the future, thus providing a longitudinal analysis especially of the incidence and distribution of farm-based recreational activities. This would generate vital information on the type of continual adjustment made to recreational resource allocations by farm families. Of particular interest in any such analysis would be the increase or decline in the provision of recreational activities. There has been little research which has focused on the increase or decline of diversification in general. Specifically, with respect to recreation the decline of certain types of recreational activities or increase of others might be expected, as outlined in 11.2. The return of an increasing emphasis on diversification in National and European agricultural policy, for example through the England Rural Development Plan (ERDP) 2000-

2006, may mean that such an evaluation of the success or failure of diversified enterprises becomes increasingly important. An understanding of the way in which an emphasis on commercial diversification may result in a corresponding decline in non-commercial forms may also be extremely valuable.

(iv). CULTURAL RECREATION

This research has highlighted the need for a considerable engagement with the cultural component of recreational provision to generate a more detailed understanding of the multi-faceted role of this form of recreation as a cultural activity within the farming community and within farm businesses. The provision of recreation for personal use by farm household members/farm business employees is one particular area which deserves further research. The analyses presented in this study have concentrated on provision for consumers outside the farm business. However, recreation for personal use has been shown to be related, in some cases, to this wider provision of recreation. Equally, it represents an important component of 'farming culture' which contributes to the behaviour of farm businesses. Further engagement with the cultural component of recreation would clearly be valuable in its own right. It would also be useful in considering their possible commodification in the future. The use of ethnographic research methods entailing a longer more sustained period of engagement would appear to represent a highly suitable approach to this topic.

(v). GIS MAPPING.

Further research to evaluate, in more detail, the incidence and distribution of different types of recreational activities could usefully develop some of the GIS mapping techniques applied here. The exploratory analysis of the distribution of recreational activities using GIS mapping software and postcode sectors has highlighted the potential for this approach. A refined approach could provide much more detailed geographical interpretation and analysis, for example the distribution of individual types of recreation, and could equally be applied productively to many other aspects of future analysis, such as mapping of farm business pluriactive adjustments.

(vi). RESEARCH WITH NON-ADOPTERS.

Considerable detail has been provided on the characteristics of recreational activities and those farm businesses providing recreation. A limited analysis has been undertaken of the many non-adopters of farm-based recreational activities. However, as a result of farmers' constructions, this has been biased towards the reasons for non-adoption of commercial

recreational activities. This highlights two further areas for research.

First, in relation to cultural recreational activities, there is a clear need for further research into the specific factors inhibiting the development of this type of activity. This would begin to address the fact that this type of recreational activity has largely been neglected in the literature. A greater understanding of these activities could complement investigation into the provision and development of these activities. Secondly, although an initial analysis of the reasons for non-adoption of diversification recreational activities has been undertaken based on the respondents to the postal questionnaire survey, there remains considerable scope for further more detailed work on this group. Subsequent investigations could consider the features of the many non-adopters of farm-based recreational activities. Indeed, a wide range of 'resistances' inhibiting the provision of farm-based tourism, and other farm-based diversification activities, were identified in Chapter 2. Thus, potential exists for a more comprehensive examination of the relative importance of these factors in inhibiting the adoption of farm-based recreation by farm businesses at the farm level. Such an analysis would also provide a useful insight into the factors inhibiting the further development of recreation as a diversification enterprise for consideration by policy makers, for example in the implementation of the ERDP.

Detailed insights into the phenomenon of farm-based recreation provided by this study form an important benchmark for future research on this activity. The themes identified above provide direction for many routes of fruitful future investigation. Indeed, the continual evolution associated with farm-based recreational activities requires further research if a fuller understanding of this highly diverse and fascinating activity is to be attained.

12. References.

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13. Acknowledgements.

I would like to thank Nick Evans for his supervision and guidance throughout this research project. His relaxed style of supervision, knowledge, encouragement and enthusiasm have contributed significantly to the completion of this study. I am also grateful to Brian Ilbery of Coventry University for his comments and suggestions during the course of the research.

I would also like to acknowledge the assistance of the following: University College Worcester, for its funding of the project; the farmers who responded to the postal questionnaire survey; those farm businesses which participated in the ethnographic case study phase of the research; the Geography Department at University College Worcester, which supplied a variety of facilities; the Centre for Rural Research, Geography Department University College Worcester for the opportunity to undertake some contract research; friends and colleagues in the research student community at University College Worcester; colleagues in FRCA Northern Region Rural Development Team for their support; and FRCA for its support in terms of time, facilities and fees.

Finally, thanks go to my parents for their support in numerous ways and to Sarah for her patience, continuous support and encouragement.

14. Appendices.

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14.1. Questionnaire Schedule.

**Worcester College of Higher Education, Geography Department.
Survey of Farm-Based Recreation in England and Wales.**

For Office Use Only.

Area Code	1	2	3	4	5	6	7	8
Postcode Sector								

IF YOU DO NOT THINK YOU HAVE ANY RECREATIONAL ACTIVITIES ON YOUR FARM:

Please complete pages 1, 2 and 3.

IF YOU DO HAVE RECREATIONAL ACTIVITIES ON YOUR FARM:

Please complete pages 1, 2 and 4.

1. What size is your farm? (Circle the appropriate number)

Up to 49 acres	1
50 to 249 acres	2
250 to 749 acres	3
750 acres and over	4

2. Has the size of the farm changed in the past five years?

No	1
Increased	2
Decreased	3

3. Please indicate the most important agricultural enterprises on your farm (Circle all the important ones).

Arable Cropping	1
Sheep Production	2
Beef Production	3
Dairying	4
Horticulture	5
Pigs / Poultry	6
Other Type (Please specify)	7
No Agricultural Production	8

4. Do you / your family:

Own more than 50 per cent of the farm?	1
Rent more than 50 per cent of the farm?	2
Manage the farm for a company / someone else?	3

5. How long have you been working / managing the farm?

less than 5 Years	1
5 Years or more	2

PTO

6. Do any of the following recreational activities currently take place on your farm? (For events see Q7).

Please circle ALL the appropriate numbers and include activities even if you do not charge for them.

OPEN TO THE GENERAL
PUBLIC WITHOUT
BOOKING

AVAILABLE TO
PUBLIC BY
ARRANGEMENT
ONLY

ONLY AVAILABLE TO
MEMBERS OF PRIVATE
GROUPS / SYNDICATES
/ CLUBS

ONLY AVAILABLE
FOR PERSONAL USE,
FAMILY, FRIENDS,
EMPLOYEES ETC

Game Fishing	1	1	1	1
Coarse Fishing	2	2	2	2
Horses for Riding / Trekking / Lessons	3	3	3	3
Gallops / Cross Country Course / Other Facilities for Jumping / Riding	4	4	4	4
Game Shooting	5	5	5	5
Rough Shooting	6	6	6	6
Clay Pigeon Shooting	7	7	7	7
Go-Karting / Quad Bikes	8	8	8	8
Off-road 4x4	9	9	9	9
Water Sports (Windsurfing / Sailing etc)	10	10	10	10
Golf Course / Driving Range	11	11	11	11
Indoor Sports Facilities	12	12	12	12
Village Sports Pitches	13	13	13	13
War Games / Paintballing	14	14	14	14
Facilities for Models (Planes / Boats etc)	15	15	15	15
Museum	16	16	16	16
Adventure Play Area / Children's Play area	17	17	17	17
Picnic Site	18	18	18	18
Catering (Farm Restaurant / Teas / Coffee shop)	19	19	19	19
Access Agreements (eg Countryside Stewardship)	20	20	20	20
Nature Reserve / Country park	21	21	21	21
Laid out Farm Trails / Nature Trails / Cycle Trails	22	22	22	22
Farm Visitor Centre with regular demonstrations (Shearing / Spinning / Weaving / Lambing / Milking / Cheesemaking / Hedgelaying / Dry Stone Walling / Country Skills)	23	23	23	23
Birthday Parties	24	24	24	24
Educational Facilities for Schools	25	25	25	25
Working Farm Tours	26	26	26	26
Rare breeds / Wildlife Park / Pets' Corner / Farm animals	27	27	27	27
Others (Please Specify)	28	28	28	28
	29	29	29	29
	30	30	30	30

7. Have any of the following recreational events occurred on your farm in the past 12 months?

Farm Open Days / Farm Tours / Organised Farm Walks	1
Farm Shows	2
Traction Engine / Tractor / Vintage Machinery Rallies	3
Lambing / Shearing Days	4
Ploughing Matches	5
Sheep Dog Trials	6
Concerts / Fairgrounds	7
Caravan Rallies	8
Motor Sport (Bikes / Quads / Rallying)	9
Point to Point Races / Gymkhanas / Eventing etc	10
Historic Battle Re-enactments	11

Please list any other recreational events which you have.

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.....

If you have any of the recreational activities listed on this page please specify which is your main one, then GO STRAIGHT TO QUESTION 11 ON PAGE 4.

.....

8. Have any recreational facilities or events occurred on the farm in the past, but do not take place now?

Yes (Please specify which) 1
 No 2

9. Are any recreational ventures being planned or developed on the farm?

Yes (Please specify) 1
 No 2

If you answered YES to either of the above would you be willing to participate in further, personally conducted, research? If you would, please could you provide a contact name and telephone number.

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10. Which, if any, of the following are IMPORTANT reasons why you have not developed farm-based recreational activities? (Please circle ALL the appropriate numbers).

There is lots of local competition (farm / non-farm)	1
No need to diversify.	2
You had never really thought about it.	3
You do not think there is enough demand locally (tourists / local population)	4
The farm is in an unsuitable location for visitors (off beaten track)	5
Your tenancy agreement restricts development.	6
You have insufficient labour available.	7
Lack of available capital to invest.	8
You do not have enough time	9
You have had problems obtaining advice and information.	10
You have had, or think you would have, difficulty obtaining planning permission.	11
You have had, or think you would have, difficulty with other legislation (eg health and safety).	12
You do not think it would be profitable enough.	13
You prefer farming and are not interested in diversification.	14
You value privacy	15
You have a lack of experience with recreation.	16
There is a lack of suitable resources on the farm	17
The farm is diversified in other ways.	18
Other reasons (please provide details)	19

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Thank you very much for taking the time to complete and return the questionnaire.

11. When did recreation first start operating on the farm?

Before 1980	1
1980-1984	2
1985-1989	3
1990 - present	4

12. Do any of these recreational activities also involve accommodation on the farm?

Yes (Specify the recreation)	1
No	2

13. Do you have any retailing businesses on the farm (eg gift shop / farm shop / craft centre / PYO) ?

Yes	1
No	2

14. Are any ADDITIONAL recreational ventures being planned or developed on the farm?

Yes (Please specify)	1
No	2

15. Have any recreational activities been:

Expanded? (Please specify which)	1
Contracted/Stopped? (Please specify which)	2
Modified? (Please specify which)	3

16. How important is farm-based recreation to the continued operation of the farm business?

Very Important	1
Some Importance	2
Minor Importance	3

17. Do you charge for the main recreational enterprise on the farm?

Yes	1
No	2

18. Which, if any, of the following were important factors when the decision was taken to set up recreation on the farm? (Please circle ALL the appropriate numbers).

Extra income.	1
Employment for family members or workers.	2
To make use of spare / suitable land and / or buildings and / or capital.	3
For personal interest / hobby.	4
Availability of government grants.	5
Encouragement of advisors and / or marketing groups.	6
Enjoy contact with visitors to the farm.	7
Suitable location (eg close to main road)	8
High demand for recreation.	9
For the benefit of others.	10
Influence of friends, family, neighbours or press.	11
Other reasons (please provide details).	12

19. If you would be willing to participate in further, personally conducted, research please could you provide a contact name and telephone number.

.....

Thank you very much for taking the time to complete and return the questionnaire.

14.2. Covering Letter.

Stephen Chaplin
 Research Centre
 Worcester College of Higher Education
 Henwick Grove
 WORCESTER
 WR2 6AJ

☎ (01905) 855322

Date as Postmark

Dear Sir/Madam,

Survey of Farm-Based Recreation in England and Wales

The attached questionnaire forms the major part of a 3 year Ph.D. geography research project on farm-based recreation, sponsored by Worcester College of Higher Education. Relatively little is known about recreational activities on farms so this questionnaire has been designed to see where, what types and how many of these activities exist. Recreational activities on farms are not just those which are open to the general public on a daily or regular basis. They also include activities available by arrangement, recreation by members of private clubs/syndicates, recreation for personal use (friends, family and employees) and also short term recreational events.

So if you have any of these I would be very grateful if you, or another suitable person involved with your farm, could complete and return the questionnaire in the pre-paid envelope. It should only take a few minutes to complete. For each question, please could you circle the appropriate number, or in some cases numbers. A few questions will also require single word answers.

PLEASE NOTE: *Even if you don't have any of these I would still greatly appreciate you spending just a couple of minutes of your time completing the questionnaire because it includes 8 quick questions, like the example below, about farmers who have not diversified into recreational activities. This information and a good response rate is extremely important to the success of the research.*

1. What size is your farm?

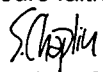
- | | | |
|--------------------|-------|---|
| up to 49 acres | | 1 |
| 50 to 249 acres | | 2 |
| 250 to 749 acres | | 3 |
| 750 acres and over | | 4 |

Would indicate that your farm is between 50 and 249 acres in size.

Of course, any information you provide will be treated in the strictest confidence and used for my personal research purposes only.

I do hope that you will be able to help.

Yours faithfully


 Stephen Chaplin

14.3. Follow-Up Letter.

Stephen Chaplin
Research Centre
Worcester College of Higher Education
Henwick Grove
WORCESTER
WR2 6AJ

☎ (01905) 855322

Date as Postmark

Dear Sir/Madam,

Survey of Farm-Based Recreation in England and Wales.

You should have recently received a questionnaire from me about farm-based recreation. Just in case you have mislaid the original questionnaire, I am enclosing another copy. If you have not already completed the questionnaire, I would greatly appreciate you spending a little of your time doing so and then returning it to me in the pre-paid envelope provided. For each question, please could you circle the appropriate number, or in some cases numbers.

PLEASE NOTE:

If you feel that this survey does not apply to you, perhaps because you do not have any recreational activities or events on your farm, my research is not just concerned with farmers who have recreation. A very important part of it is to understand the reasons why farmers have not diversified into recreational activities. If this is the case on your farm I would be most grateful if you could fill in questions 1-5 on page 1 about the farm and questions 8-10 on page 3 about the reasons why you have not developed any recreational activities. These quick questions should only take you a couple of minutes to complete and are very important to the success of the research.

Of course, any information you provide will be treated in the strictest confidence and used for my personal research purposes only.

I do hope that you will be able to help.

Yours faithfully

Stephen Chaplin

If you have already returned a questionnaire to me kindly disregard this letter.

14.4. Published Material.

Proceedings of the Franco-British Symposium on Rural Geography, 1997. Establishing the significance of farm-based recreation in post-productivist agriculture in England and Wales. Pages 49-66. IN Environnement et nature dans les campagnes. Agriculture de qualite et nouvelles fonctions. Actes du 3^e colloque franco-britannique de géographie rurale tenu à Nantes, du 11 au 14 septembre 1997.

Establishing the significance of farm-based recreation in post-productivist agriculture in England and Wales

Stephen CHAPLIN*

This paper focuses on the provision of recreational activities on farms. This is an area which has received very little research attention despite an increased emphasis on leisure and recreation in a post-productivist agriculture. After a brief introduction the paper is divided into four main sections. In the first some of the definitional issues associated with the phenomenon of farm-based recreation are explored. The second section considers the selection of study areas and the administration of an extensive postal questionnaire survey of 4000 farms in England and Wales. In the third section of the paper the focus shifts to present the preliminary findings of this questionnaire survey. The discussion presents the incidence of farm-based recreation and highlights differences in recreation provision between the county study areas. Subsequently, in the final section, the significance of farm-based recreation in the development of farm businesses, especially as part of a post-productivist transition, is evaluated.

Introduction

It is possible to characterise two broad types of recreation provision on farms :

1 - Recreation as a non-business activity

Recreation occurs on farms in a number of non-business guises. Many recreational activities represent a very traditional use of farmland, for example 'field sports' such as hunting and shooting. Whilst these traditional activities may have tangential benefits, for example pest control, a more important aspect may be their role as a social activity for farm household individuals and rural communities. Indeed, they may make an important contribution to identity, tradition and culture in farming and rural communities. In addition to this traditional element recreation may take the form of an altruistic activity. Many recreational activities on farms are orientated towards education or public relations (for example visits by local schools and farm open days).

2 - Recreation as a farm business development option

Farm-based recreation may fulfill several important roles in the development of farm businesses. Recreational enterprises can provide an additional source of income, employment for family members or workers and an effective use of underutilised or redundant farm resources. In some cases they may also be important in the context

* Geography Department, Worcester College of Higher Education

of farm business succession and continuity. Recreational activities are also highly amenable to linkages with other recreational activities and other on-farm business development options. Recreation may act as a attractant which is linked to enterprises such as accommodation, for example as an activity holiday, or product retailing activities, for example a rare breeds park with a gift shop. It must be remembered that in these cases it is not always possible to isolate the recreational element as it may contribute little to any profitability of the combined enterprises. These linkages have rarely been explored in the literature, although the strategy of combining accommodation and recreation enterprises to exploit niche markets was observed by Evans and Ilbery (1992).

The groundbreaking studies of Davies (1973), the Dartington Amenity Research Trust (DART 1974), Bull and Wibberley (1976) and Denman (1978) elucidated the existence of a wide range of business and non-business recreational activities on farms. More recently, however, the emphasis in the literature has been almost exclusively on the business component at the expense of the non-business component. This shift can be traced to the wholesale reforms of the European Common Agricultural Policy (CAP) which started during the late 1980's. Notable aspects of these changes, to date, include on-going reductions in agricultural support payments, increasing environmental regulation via the implementation of agri-environmental schemes, cuts in guaranteed intervention prices, restrictions on livestock numbers and reductions in the volume and value of subsidised agricultural exports. These changes are commensurate with falling agricultural incomes and are widely regarded as characterising a post-productivist era (Bowler *et al* 1992, Shucksmith 1993). A rapid period of adjustment by farm businesses has ensued which has provided an enduring focus for agricultural geographers. Indeed, further change appears inevitable and agriculture in England and Wales remains in a state of flux.

In the context of these income pressures the business development component of farm-based recreation may become an increasingly important option with which farms can engage (Ilbery 1989). Indeed, the development of a number of less traditional types of recreational activities on farms during this period (for example, farm parks, war games) is perhaps indicative of the need for adjustment. However, engagement with recreation as a business development option, or indeed any business development option, is not a new phenomenon and many farm businesses had engaged with such options prior to the more rapid period of adjustment currently being experienced.

1 - Towards a definition of farm-based recreation

A large number of contemporary studies of farm business development exist and many of these inherently include a farm-based recreation component, for example the literature on farm diversification and pluriactivity (Ilbery 1988, Edmond *et al* 1993, Bateman and Ray 1994, Edmond and Crabtree 1994, Bowler *et al* 1996). Unsurprisingly, these studies conceptualise recreation solely as a farm business

development (and especially adjustment) option. Their use of the term farm-based recreation appears to be somewhat misplaced, as recreation encompasses not only a business development component but also a non business component. Indeed, there have been no recent studies which have considered these two components together, even though the same specific type of recreation may occur as a business development route on one farm and be entirely incidental to business development on another.

The preceding discussion challenges the narrow conception of farm-based recreation solely as an alternative farm enterprise which may play a role in farm business development. As a result it is argued that a re-conceptualisation of the term farm-based recreation, to encompass both components of the phenomenon, is necessary. Indeed, a pre-occupation with farm-based recreation as a business development option is misplaced as it may have an equally important role in education, rural tradition, culture and identity. Further, this 'incidental' non-business component may represent an important reservoir from which transition to a business development option may occur.

Having advocated a broader definition of recreation it is necessary to identify the specific types of activities and types of provision which this encompasses. The term farm-based recreation potentially includes a wide range of very diverse types of activity from shooting, fishing and horse riding to children's play areas, rare breeds parks, educational facilities and open farms. In most cases the recreational nature of these activities is self-evident but it is possible to identify several where this is not the case. For instance Slee (1987) highlighted the recreational aspect of pick your own enterprises (PYO), while other examples include craft shops, art galleries and car boot sales. The primary aim of these activities is the retailing of products rather than recreation, even though they contain an incidental recreational element.

In addition to the diversity of different types of recreation the provision of these types may occur in a variety of different ways ranging from recreation open to the public without booking, recreation only available to members of private clubs or syndicates through to short term recreational events. In addition farms also have an almost unique potential for supplying recreation to family members, employees or friends at the expense of the wider market. Despite this enormous diversity and complexity the literature does not differentiate between different types of provision and as a result it is unclear which types different studies have included. In relation to recreation for personal use there is much scope for confusion when asking farmers if they have say riding or shooting on their farm and withstanding the need to differentiate recreation for personal use, it represents a 'perk' which may encourage family members to remain on the farm. In addition personal interest and experience may represent a useful starting point for the development of recreation as a business development option. The literature has almost exclusively ignored the existence of short term recreational events and visits (although see DART 1974). Yet each year the National Farmers Union (NFU) actively promotes a selection of farms with open days and events connected with agriculture (NFU 1997) and there is significant potential for farms to host both agricultural and non-agricultural events.

There is clearly considerable scope for overlap and confusion and in this definitional context it is not surprising that there is a lack of information or consensus about the incidence and geographical distribution of farm-based recreational activities (for a

review see Evans and Ilbery 1989). In the light of this discussion it is possible to re-define farm-based recreation as:

« all those temporary or permanent activities with a distinct, rather than incidental, recreational element which entail members of the public visiting a working farm ».

2 - Study areas and methodology

Different types of area represent different opportunities and constraints for different types of recreation on farms, reflecting specific local historical and geographical conditions. The diversity of recreation, and especially the non-business development component, means that it may be found in a wide range of areas. Yet, no studies have examined the specific incidence and nature of recreation in different parts of England and Wales and associations between specific types of recreation and farm characteristics have never been differentiated. In order to address this shortcoming an extensive postal questionnaire survey of nearly 4000 farm businesses was undertaken.

The statistical technique of cluster analysis (Everitt 1993) is employed to develop an areally stratified sampling framework based around county units and agricultural characteristics. This uses fourteen variables from the Agricultural Census (Ministry of Agriculture Fisheries and Food 1994) to explore geographical variations in the potential supply of recreation according to farm characteristics. These variables are representative of three important agricultural dimensions, labour usage, farm type and farm size which have all been identified as influencing the development of recreation (Bull and Wibberley 1976, McInerney and Turner 1991). The clustering process groups together counties with similar agricultural characteristics. A classification is produced which identifies six distinct clusters of counties. Subsequently, an informative demand dimension is used to select counties from each of these agricultural clusters for sampling. This ensures that as far as possible the eight counties selected reflect the broad agricultural and demand characteristics of each cluster.

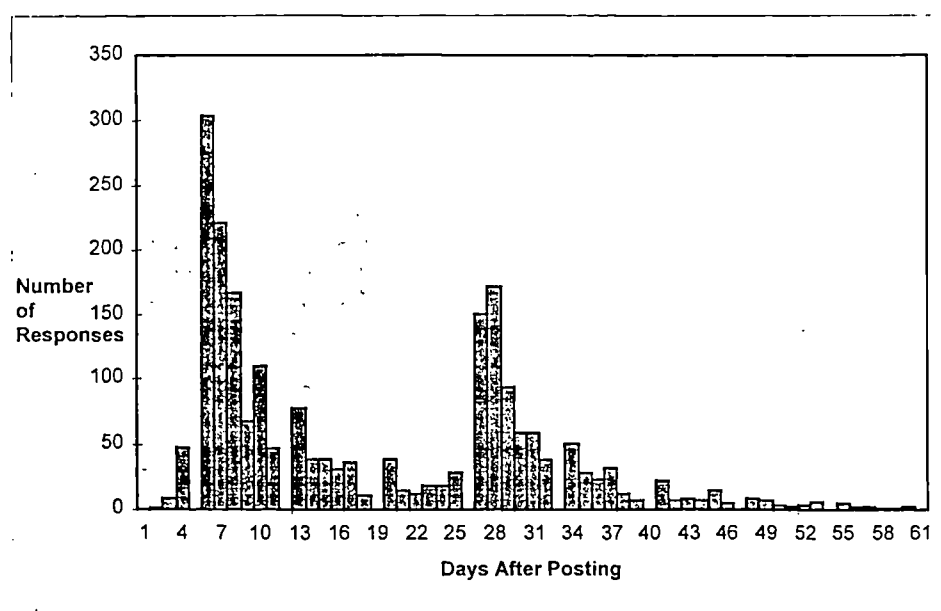
The British Telecommunications Business (BTB) Database was used as the sampling frame for the questionnaire survey. This is essentially an electronic Yellow Pages telephone directory which is very up-to-date and highly flexible in terms of listings, areal coverage and outputs (see Ilbery *et al* 1996). Five hundred farm businesses were selected at random from each of the 8 county study areas to receive a questionnaire. The questionnaire itself was deliberately short as it is assumed that as the questionnaire length increases so too does the likelihood of obtaining a low response, although there is little firm evidence to support this assumption (Moser and Kalton 1981). The questionnaire was primarily concerned with gathering data relating to:

1. Farm profile information, required for analytical purposes, relating to farm size, recent changes in farm size, important agricultural enterprises, land occupancy and recent changes in occupancy;

2. The incidence of different types and types of provision of recreational activities enterprises;
3. More detailed information relating to aspects of these recreation enterprises;
4. The reasons for adoption or non-adoption of recreational enterprises.

Of the 3969 questionnaires originally sent out 1291 were returned, giving an initial response rate of 32.5%. The follow-up, 3 weeks later, produced a further 948 replies or 23.2% and an overall response of 2237 which equates to a very respectable return of 56.4%. Although this is by no means an exceptional response, it is certainly extremely satisfactory when bearing in mind the low rates that can result from postal questionnaires and the rates achieved by other contemporary farm surveys. The pattern of response can be seen in Figure 1. The majority of responses (93%) had been received within 40 days of the initial mailing (18 days after the follow-up). It is notable, however, that responses continued to trickle in up to 168 days (over 24 weeks) after the initial mailing, although for practical purposes a cut-off point of 80 days was adopted.

Figure 1. Pattern of Response (Follow-up posted on day 21)



Of the total response of 2237 questionnaires 129 could not, for various reasons, be used for analysis giving a net total of 2108 usable questionnaires. Of these 26 responses came from holdings which had no agricultural production. Rather than eliminate these from the database it was decided to retain them. They are all recorded in the sampling frame (BTB Database) under the heading 'farmers' and, therefore, it is possible that they might represent an opportunity to explore the role of recreation in disengagement and exit from farming.

This overall summary disguises significant inter-county variations in response. A more detailed breakdown of these is presented in Table 1. The total response exhibits significant variations from 49%, 53% and 53% in Cheshire, Leicestershire and Gwynedd respectively to 60% and 62% in Hertfordshire and Gloucestershire. Overall it is possible that these differences may be connected to differences in the incidence of recreation with areas of high incidence perhaps having higher levels of response. More specifically it is possible to speculate that the lower levels of response in Cheshire might correspond to the predominance of intensive dairying in this area, while in Gwynedd a Welsh nationalist and speaking element might be partly responsible. Indeed, one blank questionnaire returned from this county expressed the opinion "cymru am byth" which apparently means simply "I am Welsh". The higher levels of response in Gloucestershire might be associated with an element of local affinity to a college located in the adjacent county of Hereford and Worcester. In contrast the similarly high response from Hertfordshire might reflect the educational backgrounds of farmers in this county, a higher level of exposure to farm research or perhaps more farm secretaries. Clearly, it is impossible to attribute directly the variations in response rates to any of these factors.

The data obtained from the postal questionnaire formed the basis of a database (Microsoft Excel). Using frequency counts and cross-tabulations of the different variables in the database enables those farms with recreation and specific types of recreation to be differentiated by geographical area, farm characteristics and some specific characteristics of the adopters. This identifies general associations in the data but it does not provide direct explanations of these associations. In addition the limitations of the postal questionnaire data collection in relation to more complex factors mean that further research is necessary. More detailed insights are achieved by undertaking ethnographic research with a small sample of the respondents ($n=20$). This seeks to provide more direct explanations for the development of recreation and is undertaken by placing the provision of recreation within the context of all the other on-going business development options employed by these individual farm businesses over time (the results of this phase of the research are not presented here).

Table 1. Summary of Response Rates

COUNTY	FARMS SURVEYED (N)	INITIAL RESPONSE %	RESPONSE TO FOLLOW-UP %	TOTAL RESPONSE	
				N	%
Gwynedd	500	27.0	26.4	267	53.4
Durham	500	29.8	26.8	283	56.6
Hertfordshire	469	40.0	20.6	285	60.7
Humberside	500	32.4	24.2	283	56.4
Kent	500	37.2	21.2	292	58.4
Gloucestershire	500	34.0	28.2	311	62.2
Leicestershire	500	34.4	18.8	266	53.2
Cheshire	500	25.4	24.6	250	50.0
TOTALS	3969	32.5%	23.8%	2237	56.4%

3 - The incidence and distribution of recreation

The overall results of the postal questionnaire survey are presented in Table 2. If all activities are included they indicate that 40% of the responding farms (855) have farm-based recreation. Excluding short term events gives a lower level of 34% of the responding farms. This level of recreational activities is significantly higher than those reported by existing studies. These have typically found recreation on about 10-15% of farms (Bull and Wibberley 1976, Carruthers 1986, Gasson 1987, Ilbery *et al* 1996). The focus on recreation as a business development option in the more recent studies may explain this lower level, while the difference from early studies may be indicative of the development of recreational activities on farms.

Disaggregating the extent of recreation according to the type of provision (Table 2) reveals that less than 9% have activities which are available to the public without prior arrangement. The category of recreational events and visits, which had occurred on 18% of farms in the past 12 months, is one which has almost exclusively been ignored in previous research, with the notable exception of DART (1974) who examined farm open days. It is also unclear to what extent previous studies have elicited information relating to recreation by members of private clubs/groups/syndicates. This category of recreation is widespread on many farms (21%), yet in most cases it was evident that the farmers did not consider these to be 'unconventional' recreational activities or 'diversification'. Many farmers who did have recreation of this type of provision completed the section relating to farms with no recreational activities, despite the clear instructions. Further analysis will identify the specific types of recreation which this

may relate to but it is possible to speculate that it will be comprised primarily of traditional 'field sports'.

Table 2. The overall incidence of farm-based recreation, by type of provision

TYPE OF PROVISION	Number of farms	% of responding farms
1. Open to the general public for at least 4 months of the year without booking.	179	8.5%
2. Available to the public by arrangement only.	323	15%
3. Only available to members of private groups / syndicates / clubs.	450	21%
TOTAL	724	34%
Recreational events / visits in the past 12 months.	382	18%
OVERALL TOTAL	855	40%

Source: author's survey

The subsequent analysis focuses predominantly on permanent recreation which comprises the majority of activities involving public access to farms and which will be referred to simply as recreational activities. Recreational events/visits are significantly different in character and are considered separately. This section introduces the element of individual types of recreation into the analysis for the first time. The total provision of recreational activities on farms is dominated by rough and game shooting with each occurring on over 9% of the responding farms. Equestrian activities (riding and facilities), fishing (both coarse and game), clay pigeon shooting, open farms and educational interests also feature strongly with all occurring on between 3 and 7% of the responding farms. Table 3 provides a listing corresponding to the total incidence of all forms of recreational activities on farms, arranged in descending order of incidence. Such a comprehensive breakdown has never been undertaken before.

Interactions between type of provision and type of recreation are also introduced into the analysis in Table 3. Significant interactions exist which complicate the interpretation of the overall picture presented so far. For example, in relation to game shooting the majority of the activities are only available to members of private clubs or syndicates. In contrast the provision of catering activities and rare breeds farms is predominantly on an open to the general public without booking basis. Diversity rapidly becomes apparent as a dominant theme. This is evident both in terms of the mixture of category-type interactions and the range of different activities, including many which have a relatively low incidence. In many cases these appear to have been overlooked, or lost in amalgamated groups, by previous research. It is possible to identify types of recreation which occur exclusively or predominately as a single category of provision, through to types of recreation occurring across a range of

categories of provision, for example facilities for riding. In terms of diversity of type there are over 15 different types of recreational activity which each occur on less than 2% of the responding farms. These include, for example, rare breeds parks, airfields/parachuting and golf courses.

Table 3. The overall incidence of different types of recreational activities

RECREATION TYPE	Number of responding farms by category of provision*			Total number of farms with recreational activities	% of responding farms
	1	2	3		
Game Shooting	5	35	217	256	12.1
Rough Shooting	7	92	91	189	9.0
Coarse Fishing	37	24	89	144	6.8
Facilities for Riding: Gallops, Cross Country Course	11	48	56	111	5.3
Educational Facilities	19	83	6	106	5.0
Clay Pigeon Shooting / Gun Club	11	44	52	105	5.0
Horses for Riding/Trekking/Lessons	24	45	27	90	4.3
Open Farm	18	47	11	73	3.5
Game Fishing	8	13	49	70	3.3
Access Agreements	40	13	2	55	2.6
Picnic Site	26	6	1	33	1.6
Village Sports Pitches	8	16	8	31	1.5
Facilities for motor sport: Go-Karting Quad Bikes, Rallying, Off-Road 4x4	1	10	20	30	1.4
Facilities for Models	9	6	15	30	1.4
Laid out Farm Trails / Nature Trails / Cycle Trails	25	1	2	28	1.3
Farm Restaurant, Teas, Coffee Shop	24	2	1	27	1.3
Nature Reserve / Country Park / Gardens	18	4	4	26	1.2
Facilities for Farm Birthday Parties	13	9	1	22	1.0
Adventure Play Area / Children's Play Area	14	3	4	21	1.0
Rare Breeds, Wildlife Park, Pet's Corner, Farm Animals	19	2	0	21	1.0
Golf Course / Driving Range / Crazy Golf / Pitching	15	1	3	16	0.8
War Games / Paintballing	1	7	5	13	0.6
Museum	6	6	1	12	0.6
Airfield / Gliding / Parachuting	5	1	3	9	0.4
Others	4	4	3	12	0.6
TOTAL	179	323	450	724	34

* see Table 2

Source : author's survey

So far the discussion has concentrated on recreational activities and has excluded the distinct category of recreational events/ visits. These represent a second major component of farm-based recreation which deserves attention. Recreational events/visits are quite widespread. They had occurred on 372 (18%) of the responding farms in the previous 12 months. In the majority of cases (65%) these events/visits occurred on farms with some other form of recreational activity.

A breakdown of the different types of events is presented in Table 4. Farm open days, encompassing a range of activities, are the most common form of recreational events. These had occurred on 9% of the responding farms in the past 12 months. Other events/visits exhibit a much lower incidence. Two notable examples of traditional agricultural events include ploughing matches and sheep dog trials which had occurred on 1.6% and 1% of the responding farms respectively.

Table 4. The incidence of different types of short term recreational events/visits during the previous 12 months

RECREATION TYPE	Number of farms	% of responding farms
Farm Open Days: Demonstrations, Working Farm Tours, Organised Farm Walks, Lambing or Shearing Days, Craft Fairs, Farm Shows	189	9.0
Caravan Rallies / Group Camps	72	3.4
Riding Events: Point to Point Races, Gymkhanas, Eventing, Hunting, Equestrian Clubs	50	2.4
Motor Sport	40	1.9
Ploughing Matches	33	1.6
Sheep Dog Trials	21	1.0
Social Events: BBQ, Barndances, Charity Events, Fetes, Fireworks	20	0.9
Machinery Rallies	15	0.7
School Visits, College Visits	13	0.6
Concerts / Fairgrounds / Circus	12	0.6
Young Farmers Club Activities / Agricultural Clubs / Breeders Clubs	5	0.2
Historic Battle Re-enactment's	4	0.2
Others	2	0.1
TOTAL FARMS WITH ACTIVITIES	382	18

Source: author's survey

Analysis by discrete types of provision and types of recreation disguises the fact that in many cases farms have more than one type of provision and more than one type of recreation. This explains why in all cases the percentage of farms corresponding to each type of provision or type of recreation does not reconcile with the overall total. Farms

with a single type of provision comprise the balance representing 72% of the farms with permanent recreational activities. Recreation for clubs or groups or syndicates is the dominant single type of provision occurring on 39% of the farms with permanent recreation. Farms with two types of provision are less widespread, occurring on 23% of the farms with permanent recreation. In this case the combination of recreation available by arrangement only and recreation for clubs or syndicates is the most common, occurring on 14% of the farms. Farms with all three categories of provision represent a little over 4% of the farms with permanent recreation. If the sub-grouping of recreational events/visits is introduced 65% of these are found on farms with some form of permanent recreational activity.

Perhaps more important than farms with more than one type of provision is the existence of multiple types of recreation on many farms. Over half of the farms with permanent recreational activities have 2 or more different types of recreation. Indeed the sample exhibits an overall average of 2.19 activities per farm. Even more striking though, over 9% of farms have 5 or more different activities with a maximum of 19 activities observed on one farm.

Sub-dividing recreational activities according to their type of provision highlights the fact that relatively few farms have multiple activities of one type of provision. However, one distinct pattern does emerge. Nearly 10% of farms with some form of recreation open to the public without booking have 5 or more different types of recreational activity of this type of provision. It seems likely that this pattern is indicative of farms which have actively combined several different types of recreation to form a multi-faceted visitor enterprise.

The idea of combinations of activities is reinforced in Table 5 which examines recreational activities and presents the association between recreation type and farms with more than one recreational activity. The table shows the average number of activities present on farms with each individual type of recreation. It is organised in descending order of average numbers of activities. This indicates the extent to which particular types of recreation are associated with farms with multiple activities. It is clear that certain types of recreation are very strongly associated with farms with high numbers of recreational activities. Picnic sites present a clear example being found on farms with an average of 7 (6 other) recreation types (in fact nearly a quarter, 24%, are located on farms with 10 or more recreational activities). Activities at the top of the table are most strongly associated with farms with multiple types of recreation and are also, therefore, most likely to be found in combination with one another. At the opposite end of the table village sports pitches, game shooting, access agreements and coarse fishing are the enterprises associated with the lowest average number of activities on farms.

Table 5. The association between recreation type and mean number of recreational activities per farm

RECREATION TYPE	Total number of farms	Mean number of recreational activities per farm
Facilities for Farm Birthday Parties	22	8.7
Adventure Play Area / Children's Play Area	21	7.5
Rare Breeds, Wildlife Park, Pet's Corner, Farm Animals	21	7.4
Picnic Site	33	7.0
Laid out Farm Trails / Nature Trails / Cycle Trails	28	7.0
Catering: Farm Restaurant, Teas, Coffee Shop	27	6.9
War Games / Paintballing	13	6.2
Other Types	12	5.9
Museum	12	5.8
Open Farm	73	5.2
Nature Reserve / Country Park / Gardens	26	4.8
Facilities for Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4	30	4.7
Facilities for Models	30	4.3
Educational Facilities. School Visits, College Visits	106	4.2
Airfield / Gliding / Parachuting	9	4.0
Clay Pigeon Shooting / Gun Club	105	3.9
Horses for Riding / Trekking / Lessons	90	3.3
Game Fishing	70	3.2
Golf Course / Driving Range / Crazy Golf / Pitching	16	3.2
Facilities for Riding: Gallops, Cross Country Course	111	3.1
Rough Shooting	189	3.1
Coarse Fishing	144	3.0
Access Agreements	55	3.0
Game Shooting	256	2.6
Village Sports Pitches	31	2.5

Source: author's survey

The incidence of recreational activities varies markedly between the different study areas (Table 6 and Figure 2). Hertfordshire and Kent exhibit the highest incidence with levels of 47% and 45%, respectively, of responding farms having some form of permanent recreational activity. At the opposite end of the spectrum the lowest level (23%) is found in the county of Gwynedd. Leicestershire, with an incidence of 34%, is identical to the overall mean incidence occurring in the sample, while of the remaining counties, Durham and Cheshire, are slightly below this mean and Gloucestershire and Humberside, slightly above. Disaggregating the distribution of recreation according to the type of provision reveals remarkably little deviation from the overall pattern of distribution. The only notable case being that of Gwynedd which exhibits the third highest level of recreational facilities open to the public without booking in contrast to

its position of having the lowest overall total of recreational activities. This perhaps reflects the seasonal and tourist nature of demand in this area. A similar pattern to the overall one is also evident for recreational events/visits.

Figure 2. The incidence of recreational activities in the county study areas of England and Wales

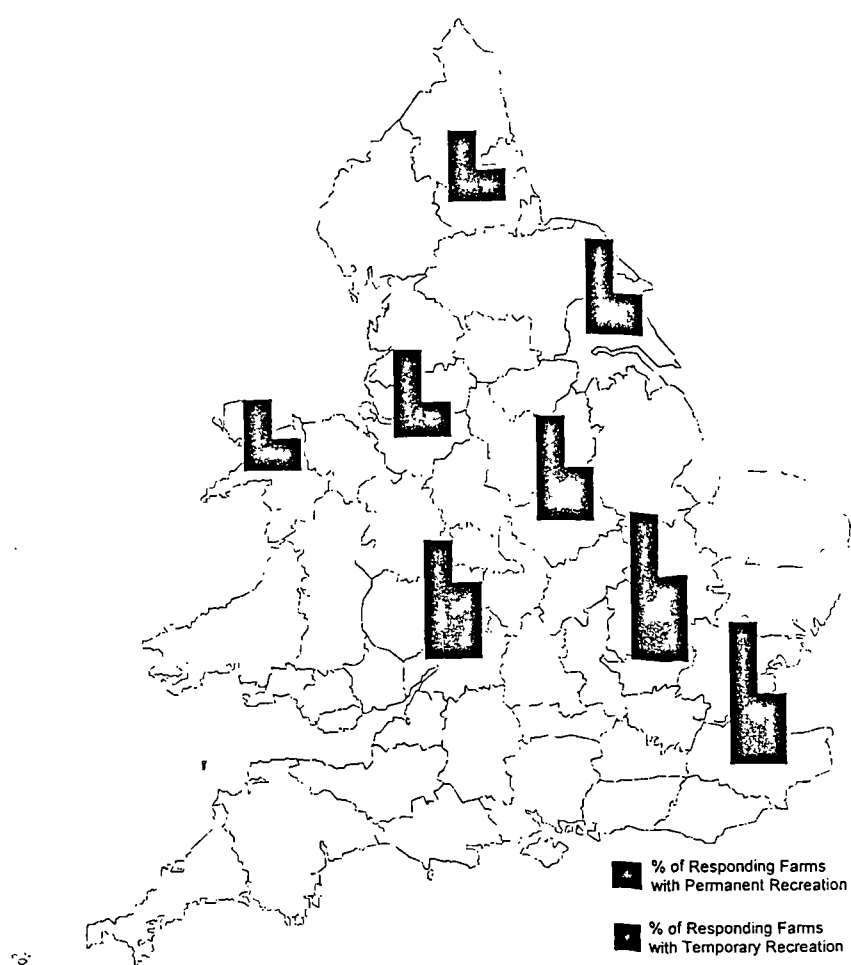


Table 6. The incidence of recreational activities in the study area counties

	STUDY AREAS								
	Gwyn	Durh	Ches	Leic	Kent	Glou	Hert	Humb	Mean
% of responding farms with permanent recreational activities	23	28	28	34	45	38	47	31	34
% of responding farms with recreational events/visits	11	11	12	18	23	25	28	14	18
Average number of activities per farm	2.1	2.2	1.9	1.9	2.7	1.9	2.4	2.2	2.2

Source: author's survey

The final aspect of the discussion considers the distribution of individual types of recreation between the county study areas (Table 7). An adapted location quotient statistic has been selected as it takes account of the response from each sample and provides an indicator of the incidence of each type of recreation in each county relative to its overall incidence in the sample (figures below one indicate an incidence below that expected, those greater than one indicate a level above that expected). These are easier to interpret than equivalent percentage figures which require reference to the sample mean.

Table 7. The distribution of individual types of recreation between the county study areas

	Gwyn	Durh	Ches	Leic	Kent	Glou	Hert	Humb	Total number of farms
Game Shooting	0.9	1.2	0.4	0.9	1.0	0.9	1.2	1.4	257
Rough Shooting	1.4	1.2	0.8	0.8	1.2	0.8	0.9	1.1	190
Coarse Fishing	0.7	1.2	1.9	1.0	1.4	0.6	0.6	0.7	150
Facilities for Riding: Gallops, Cross Country Course	0.3	0.5	1.3	0.9	1.2	1.3	1.3	0.6	115
Educational Facilities	0.9	0.7	0.8	0.8	1.3	1.5	1.0	0.6	108
Clay Pigeon Shooting / Gun Clu.	0.5	1.0	0.5	1.1	1.3	0.9	1.5	0.7	107
Horses for Riding / Trekking / Lessons	0.4	0.9	0.9	1.4	1.0	1.1	1.2	0.6	96
Open Farm	0.5	0.9	0.5	0.2	1.5	1.4	1.4	0.9	76
Game Fishing	0.9	2.3	1.5	0.4	1.1	0.4	0.9	1.0	72
Access Agreements	2.3	0.4	0.9	1.4	1.1	0.7	0.7	1.1	55
Picnic Site	2.3	0.3	1.2	0.5	1.6	0.6	0.7	1.2	33

	Gwyn	Durh	Ches	Leic	Kent	Glou	Hert	Humb	Total number of farms
Motor Sport: Go-Karting, Quad Bikes, Rallying, Off-Road 4x4	0.8	0.9	0.3	1.0	0.7	0.6	2.7	0.3	32
Village Sports Pitches	1.6	0.3	0.9	0.8	1.5	0.8	0.4	1.9	31
Facilities for Models	0.0	1.3	0.3	1.0	0.9	1.1	1.4	1.6	31
Laid out Farm Trails / Nature Trails / Cycle Trails	1.8	1.0	0.7	0.8	1.9	0.5	0.4	1.1	28
Catering: Farm Restaurant, Teas, Coffee Shop	1.9	0.7	1.1	0.9	1.7	0.2	0.7	1.1	27
Nature Reserve / Country Park / Gardens	2.4	1.5	0.4	0	1.8	0.8	0.7	0.8	26
Farm Birthday Parties	1.7	0.8	1.7	0.7	1.0	0	1.3	1.3	23
Adventure Play Area / Children's Play Area	1.8	0.5	1.9	0.4	1.9	0.6	0.6	0.5	21
Rare Breeds, Wildlife Park, Pet's Corner, Farm Animals	1.2	0	2.3	0.4	1.7	0.3	0.9	1.4	21
Golf Course / Driving Range / Crazy Golf / Pitching	0.7	0	1.0	1.6	1.2	0.3	1.3	1.6	19
War Games / Paintballing	0	0.8	0	0.6	0.9	1.0	3.3	0	13
Museum	0	0	0	1.2	3.1	0.5	0.9	0.8	13
Airfield / Gliding / Parachuting	0	2.2	0	0	1.3	0.7	1.4	2.2	9
Others	2.1	0	1.6	0	1.5	0	2.0	0.8	12

Source: author's survey

4 - Establishing the significance of farm-based recreation

This final section of this paper briefly considers the significance of farm-based recreational activities to farm businesses. It focuses on the business development component of recreation. It is possible to disaggregate the farms with recreational activities into business development and non-business development groups according to the motives which they express for the development of recreation. This identifies 223 farms (about 10% of the responding farms) which have engaged with recreation as a business development option (it should be noted that these may also have non-business options simultaneously). In contrast the remaining 30% of the responding farms with recreation (both permanent and temporary) currently have recreation as a non-business activity.

Recreation is clearly already established as an important farm business development option. However, of these farms only 111 (50%) rated recreation as of some or major importance to the continued operation of their farm businesses. Nonetheless, recreation is highly amenable to integration with other on-farm diversification activities and this

complementarity is likely to represent an avenue for future development on farms. However, perhaps more significant, given the prospect of further agricultural reforms, are the 30% of responding farms which currently have non-business recreation. Notwithstanding the fact that these are important activities in their own right they may also represent a significant base of experience for the development of more recreation businesses on farms in the future.

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